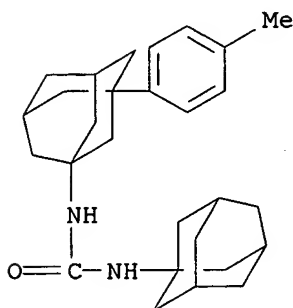


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ENTER BATCH REQUEST NAME OR (END):sss
'SSS' IS NOT A VALID BATCH NAME
Enter the name you wish to use for the BATCH request.
The name must:
    1. Begin with a letter,
    2. Have 1-12 characters,
    3. Contain only letters (A-Z) and numbers (0-9),
    4. End with /B,
    5. Not already be in use as a saved name, and
    6. Not be: END, SAV, SAVE, SAVED, or an L#.
ENTER BATCH REQUEST NAME OR (END):CC692559/b
ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:sss
ENTER SCOPE OF SEARCH (FULL) OR RANGE:full
QUERY L1 HAS BEEN SAVED AS BATCH REQUEST 'CC692559/B'
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L1 STR  
L2 18 SEA FILE=REGISTRY SSS FUL L1

=> d scan

L2 18 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
IN Urea, N-[3-(4-methylphenyl)tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl]-N'-  
tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-yl- (9CI)  
MF C28 H38 N2 O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.43	0.64

FILE 'CAPLUS' ENTERED AT 06:58:54 ON 30 JUN 2005  
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FILE COVERS 1907 - 30 Jun 2005 VOL 143 ISS 1  
FILE LAST UPDATED: 29 Jun 2005 (20050629/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12

L3 17 L2

=> d bib abs hitstr 1-17

L3 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:902086 CAPLUS

DN 141:388753

TI Heterocyclic compound modulators of Tie-2 and other kinases, and therapeutic use

IN Chen, Jeff; Dalrymple, Lisa; Epshteyn, Sergery; Forsyth, Timothy; Huynh, Tai; Leahy, James; Mann, Grace; Mann, Larry W.; Ridgway, Brian; Sangalang, Joan C.; Takeuchi, Craig

PA Exelixis, Inc., USA

SO PCT Int. Appl., 126 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004091480	A2	20041028	WO 2004-US10626	20040408
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRAI US 2003-461471P P 20030409

OS MARPAT 141:388753

AB The invention provides heterocyclic compds. for modulating protein kinase enzymic activity for modulating cellular activities such as proliferation, differentiation, programmed cell death, migration and chemoinvasion. Compds. of the invention inhibit, regulate and/or modulate kinases, particularly Tie-2. Methods of using the compds. and pharmaceutical compns. thereof to treat kinase-dependent diseases and conditions are also an aspect of the invention. Preparation of triazolyl compds. of the invention is included.

IT 783327-32-2

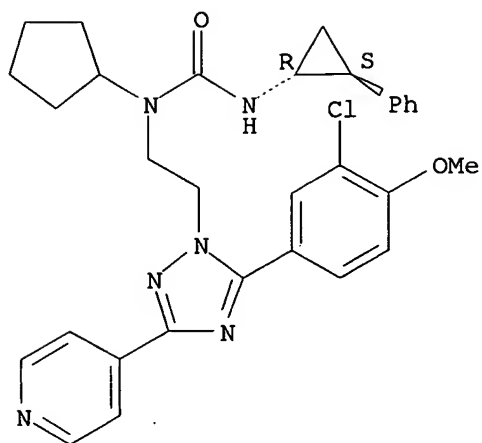
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(heterocyclic compound modulators of Tie-2 and other kinases, and therapeutic use)

RN 783327-32-2 CAPLUS

CN Urea, N-[2-[5-(3-chloro-4-methoxyphenyl)-3-(4-pyridinyl)-1H-1,2,4-triazol-1-yl]ethyl]-N-cyclopentyl-N'-[(1R,2S)-2-phenylcyclopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:875033 CAPLUS

DN 141:332214

TI Preparation of quinoline, tetrahydroquinazoline, and pyrimidine derivatives as MCH antagonist for treatment of CNS disorders

IN Sekiguchi, Yoshinori; Kanuma, Kosuke; Omodera, Katsunori; Busujima, Tsuyoshi; Tran, Thuy-Anh; Han, Sangdon; Casper, Martin; Kramer, Bryan A.; Semple, Graeme; Zou, Ning

PA Taisho Pharmaceutical Co. Ltd., Japan

SO Eur. Pat. Appl., 586 pp.

CODEN: EPXXDW

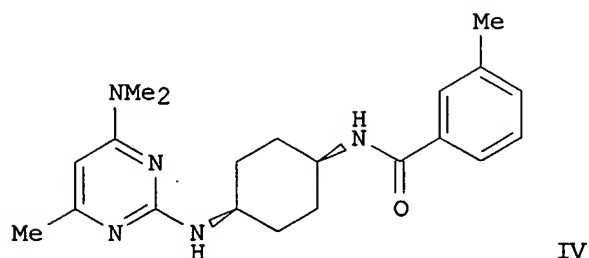
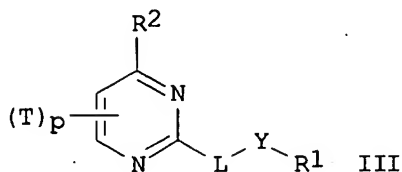
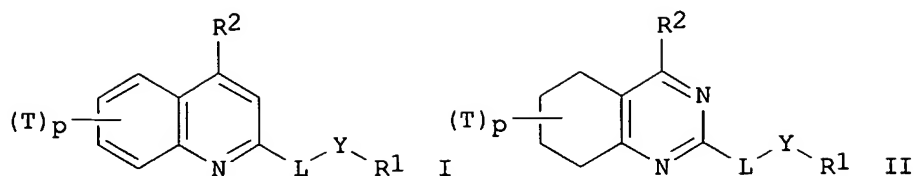
DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1464335	A2	20041006	EP 2004-7651	20040330
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	EP 1464335	A2	20041006	EP 2004-7651	20040330
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
PRAI	US 2003-458530P	P	20030331		
	US 2003-495911P	P	20030819		
	US 2003-510186P	P	20031009		
	US 2003-530360P	P	20031216		
	EP 2004-7651	A	20040330		

GI



AB Title compds. I, II, and III [wherein R1 = (un)substituted (cyclo)alkyl, (cyclo)alkenyl, alkynyl, aryl; R2 = H, halo, OH, carboxy, carbamoyl, amino, (un)substituted alkyl, alkoxy; T = independently H, halo, OH, carboxy, carbamoyl, amino, cyano, NO<sub>2</sub>, alkenyl, alkynyl, cycloalkyl, (un)substituted alkyl, alkoxy; p = 0-5; L = aminocycloalkylideneamino, etc.; Y = bond, CH<sub>2</sub>, CO<sub>2</sub>, OCO, SO<sub>2</sub>, CO, CS, CONH, CSNH, etc.; with provisos; and pharmaceutically acceptable salts, hydrates, or solvates thereof] were prepared as antagonists of melanin concentrating hormone (MCH),

an

endogenous ligand of G-protein coupled receptors (GPCRs). Examples include solution and solid phase general synthetic methods and phys. data for nearly 3400 invention compds. In addition, all exemplified compds. were assayed using high throughput functional screening to detect intracellular Ca<sup>2+</sup> concns. for accessing GPCR activation. For instance, reaction of 2,4-dichloro-6-methylpyrimidine with dimethylamine gave 2-chloro-4-(dimethylamino)-6-methylpyrimidine (40%), which was coupled with cis-(4-aminocyclohexyl)carbamic acid tert-Bu ester (60%). Deprotection (72%), amidation, and workup provided the benzamide IV•TFA. The latter demonstrated MCH antagonist activity with an IC<sub>50</sub> value of 7.6 nM. Thus, pharmaceutical compns. comprising I are useful for the prophylaxis or treatment of improving memory function, sleeping and arousal, anxiety, depression, mood disorders, seizure, obesity, diabetes, appetite and eating disorders, cardiovascular disease, hypertension, dyslipidemia, myocardial infarction, binge eating disorders including bulimia, anorexia, mental disorders including manic depression, schizophrenia, delirium, dementia, stress, cognitive disorders, attention deficit disorder, substance abuse disorders, and dyskinesias including Parkinson's disease, epilepsy, and addiction (no data). This is part III of three in a series covering the patent.

IT **773140-54-8P**, N-[1-(4-Chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-5-methylpyrimidin-2-yl]amino]cyclohexyl]urea  
**773140-55-9P**, N-[1-(4-Chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-6-methylpyrimidin-2-yl]amino]cyclohexyl]urea  
**773140-59-3P**, N-[1-(4-Chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-

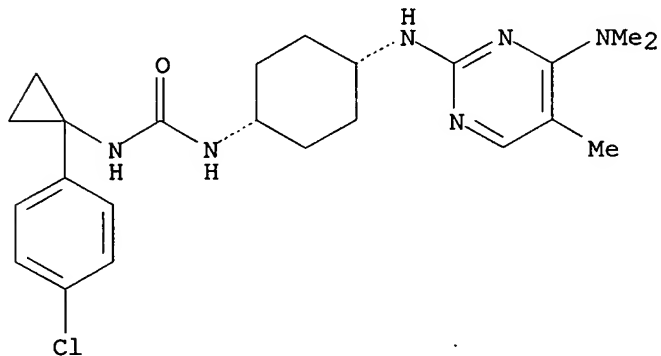
(dimethylamino)-5-methylpyrimidin-2-yl]amino]cyclohexyl]-N-methylurea  
**773140-60-6P**, N-[1-(4-Chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-6-methylpyrimidin-2-yl]amino]cyclohexyl]-N-methylurea  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MCH antagonist; preparation of quinolines, quinazolines, and pyrimidines as MCH antagonist for treatment of CNS disorders)

RN 773140-54-8 CAPLUS

CN Urea, N-[1-(4-chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-5-methyl-2-pyrimidinyl]amino]cyclohexyl]- (9CI) (CA INDEX NAME)

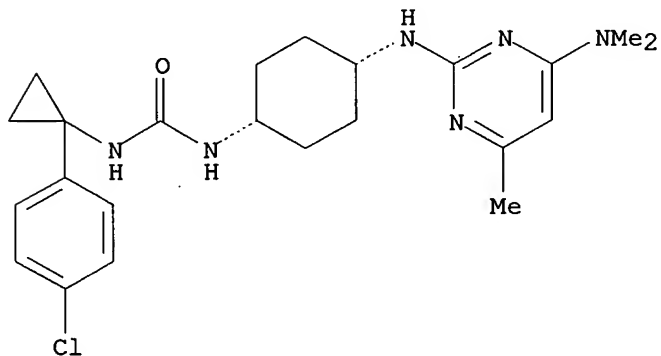
Relative stereochemistry.



RN 773140-55-9 CAPLUS

CN Urea, N-[1-(4-chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-6-methyl-2-pyrimidinyl]amino]cyclohexyl]- (9CI) (CA INDEX NAME)

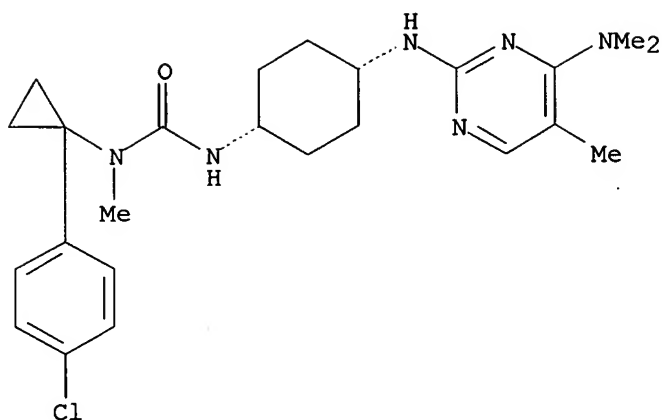
Relative stereochemistry.



RN 773140-59-3 CAPLUS

CN Urea, N-[1-(4-chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-5-methyl-2-pyrimidinyl]amino]cyclohexyl]-N-methyl- (9CI) (CA INDEX NAME)

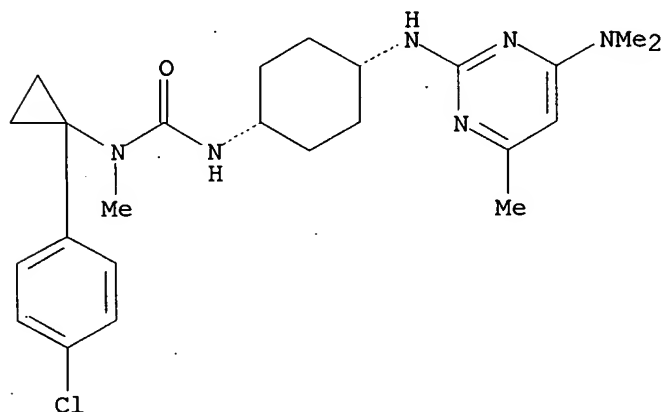
Relative stereochemistry.



RN 773140-60-6 CAPLUS

CN Urea, N-[1-(4-chlorophenyl)cyclopropyl]-N'-[cis-4-[[4-(dimethylamino)-6-methyl-2-pyrimidinyl]amino]cyclohexyl]-N-methyl- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L3 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:875032 CAPLUS

DN 141:350191

TI Preparation of quinoline, tetrahydroquinazoline, and pyrimidine derivatives as MCH antagonist for treatment of CNS disorders

IN Sekiguchi, Yoshinori; Kanuma, Kosuke; Omodera, Katsunori; Busujima, Tsuyoshi; Tran, Thuy-Anh; Han, Sangdon; Casper, Martin; Kramer, Bryan A.; Semple, Graeme; Zou, Ning

PA Taisho Pharmaceutical Co. Ltd., Japan

SO Eur. Pat. Appl., 586 pp.

CODEN: EPXXDW

DT Patent

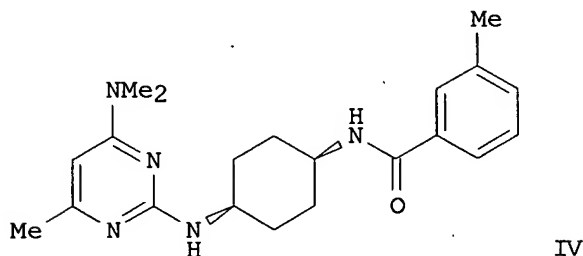
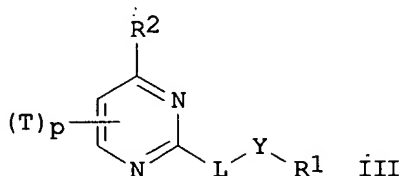
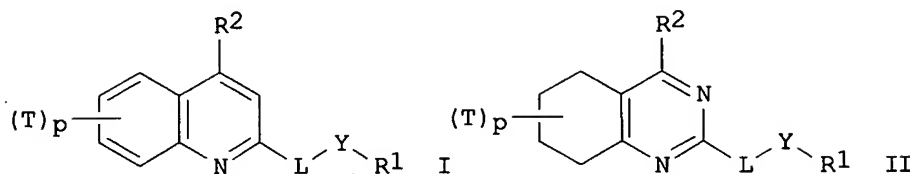
LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1464335	A2	20041006	EP 2004-7651	20040330
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	EP 1464335	A2	20041006	EP 2004-7651	20040330
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK  
PRAI US 2003-458530P P 20030331  
US 2003-495911P P 20030819  
US 2003-510186P P 20031009  
US 2003-530360P P 20031216  
EP 2004-7651 A 20040330

GI



AB Title compds. I, II, and III [wherein R1 = (un)substituted (cyclo)alkyl, (cyclo)alkenyl, alkynyl, aryl; R2 = H, halo, OH, carboxy, carbamoyl, amino, (un)substituted alkyl, alkoxy; T = independently H, halo, OH, carboxy, carbamoyl, amino, cyano, NO2, alkenyl, alkynyl, cycloalkyl, (un)substituted alkyl, alkoxy; p = 0-5; L = aminocycloalkylideneamino, etc.; Y = bond, CH2, CO2, OCO, SO2, CO, CS, CONH, CSNH, etc.; with provisos; and pharmaceutically acceptable salts, hydrates, or solvates thereof] were prepared as antagonists of melanin concentrating hormone (MCH),  
an

endogenous ligand of G-protein coupled receptors (GPCRs). Examples include solution and solid phase general synthetic methods and phys. data for nearly 3400 invention compds. In addition, all exemplified compds. were assayed using high throughput functional screening to detect intracellular Ca2+ concns. for accessing GPCR activation. For instance, reaction of 2,4-dichloro-6-methylpyrimidine with dimethylamine gave 2-chloro-4-(dimethylamino)-6-methylpyrimidine (40%), which was coupled with cis-(4-aminocyclohexyl)carbamic acid tert-Bu ester (60%). Deprotection (72%), amidation, and workup provided the benzamide IV•TFA. The latter demonstrated MCH antagonist activity with an IC50 value of 7.6 nM. Thus, pharmaceutical compns. comprising I are useful for the prophylaxis or treatment of improving memory function, sleeping and arousal, anxiety, depression, mood disorders, seizure, obesity, diabetes, appetite and eating disorders, cardiovascular disease, hypertension,



dyslipidemia, myocardial infarction, binge eating disorders including bulimia, anorexia, mental disorders including manic depression, schizophrenia, delirium, dementia, stress, cognitive disorders, attention deficit disorder, substance abuse disorders, and dyskinesias including Parkinson's disease, epilepsy, and addiction (no data). This is part II of three in a series covering the patent.

IT 771535-28-5P 771539-54-9P 771540-43-3P

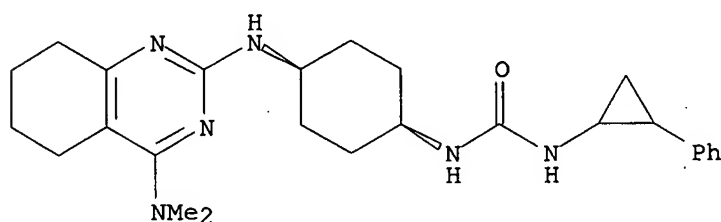
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MCH antagonist; preparation of quinolines, quinazolines, and pyrimidines as MCH antagonist for treatment of CNS disorders)

RN 771535-28-5 CAPLUS

CN Urea, N-[cis-4-[[4-(dimethylamino)-5,6,7,8-tetrahydro-2-quinazolinyl]amino]cyclohexyl]-N'-(2-phenylcyclopropyl)- (9CI) (CA INDEX NAME)

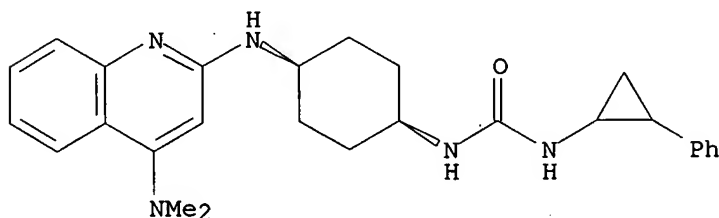
Relative stereochemistry.



RN 771539-54-9 CAPLUS

CN Urea, N-[cis-4-[[4-(dimethylamino)-2-quinolinyl]amino]cyclohexyl]-N'-(2-phenylcyclopropyl)- (9CI) (CA INDEX NAME)

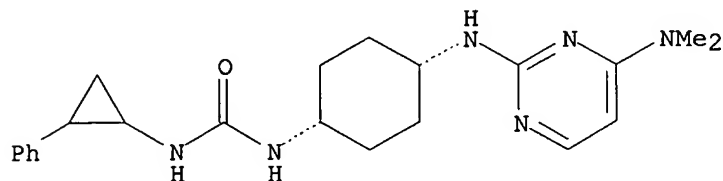
Relative stereochemistry.



RN 771540-43-3 CAPLUS

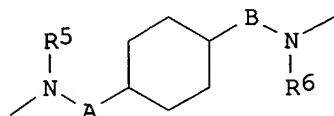
CN Urea, N-[cis-4-[[4-(dimethylamino)-2-pyrimidinyl]amino]cyclohexyl]-N'-(2-phenylcyclopropyl)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

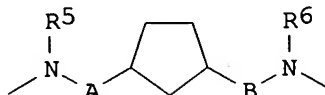


DN 141:350189  
 TI Preparation of novel quinazolines as MCH receptor antagonists  
 IN Sekiguchi, Yoshinori; Kanuma, Kosuke; Omodera, Katsunori; Busujima, Tsuyoshi; Tran, Thuy-Anh; Han, Sangdon; Casper, Martin; Kramer, Bryan A.  
 PA Taisho Pharmaceutical Co., Ltd., Japan; Arena Pharmaceuticals Inc.  
 SO PCT Int. Appl., 363 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004087680	A1	20041014	WO 2004-JP4554	20040330
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PRAI	US 2003-458424P	P	20030331		
OS	MARPAT 141:350189				
GI					



I



II

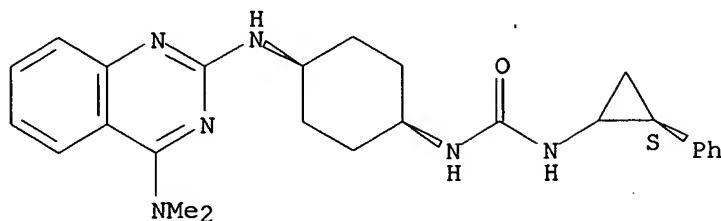
AB The title compds. QLYR1 [I; Q = (un)substituted 2-quinazolinyl; R1 = (un)substituted alkyl, cycloalkyl, aryl, etc.; L = II, III (wherein R5, R6 = H, alkyl; A, B = a bond, CH2, (CH2)2, etc.; Y = (un)substituted CONH, CSNH, C(O)O, SO2, etc.] which act as MCH receptor antagonists, were prepared E.g., a multi-step synthesis of 1-(3,4-dimethoxyphenyl)-3-[cis-4-(4-dimethylaminoquinazolin-2-ylamino)cyclohexyl]-urea hydrochloride (starting from quinazoline-2,4-dione) which showed IC50 of 13 nM against MCH receptor binding, was given. The compds. I are useful in pharmaceutical compns. (claimed) which use includes prophylaxis or treatment of improving memory function, sleeping and arousal, anxiety, depression, mood disorders, seizure, obesity, diabetes, appetite and eating disorders, cardiovascular disease, hypertension, dyslipidemia, myocardial infarction, binge eating disorders including bulimia, anorexia, mental disorders including manic depression, schizophrenia, delirium, dementia, stress, cognitive disorders, attention deficit disorder, substance abuse disorders and dyskinesias including Parkinson's disease, epilepsy, and addiction.

IT **774199-67-6P**  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of novel quinazolines as MCH receptor antagonists)

RN 774199-67-6 CAPLUS

CN Urea, N-[cis-4-[[4-(dimethylamino)-2-quinazolinyl]amino]cyclohexyl]-N'-[[2S)-2-phenylcyclopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



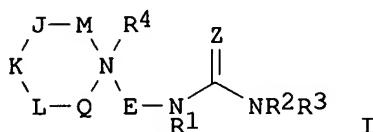
RE.CNT 6      THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3    ANSWER 5 OF 17    CAPLUS    COPYRIGHT 2005 ACS on STN  
AN    2003:622568    CAPLUS  
DN    139:164710  
TI    Preparation of ureidoalkylpiperidines as modulators of chemokine CCR3  
      receptor activity.  
IN    Ko, Soo S.; Delucca, George V.; Duncia, John V.; Santella, Joseph B., III;  
      Wacker, Dean A.  
PA    Bristol-Myers Squibb Pharma Company, USA  
SO    U.S., 145 pp., Cont.-in-part of U.S. Ser. No. 465,286, abandoned.  
      CODEN: USXXAM  
DT    Patent  
LA    English  
FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6605623	B1	20030812	US 2000-598821	20000621
	US 6331541	B1	20011218	US 1999-465288	19991217
	ZA 2001003756	A	20020509	ZA 2001-3756	20010509
	CA 2413274	AA	20011227	CA 2001-2413274	20010620
	WO 2001098269	A2	20011227	WO 2001-US19745	20010620
	WO 2001098269	A3	20030710		
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JP	2004517803	T2	20040617	JP 2002-504225	20010620
US	2003013741	A1	20030116	US 2001-7172	20011023
US	6521592	B2	20030218		
US	2004002515	A1	20040101	US 2002-279416	20021024
US	6875776	B2	20050405		
US	2004006107	A1	20040108	US 2002-279231	20021024
US	6780857	B2	20040824		
US	2004058960	A1	20040325	US 2003-465191	20030619
US	6906066	B2	20050614		
PRAI	US 1998-112717P	P	19981218		
	US 1999-161243P	P	19991022		
	US 1999-465286	B2	19991217		
	US 1999-161137P	P	19991022		

US 1999-161184P	P	19991022
US 1999-161222P	P	19991022
US 1999-465287	A3	19991217
US 1999-465288	A3	19991217
US 1999-465948	A3	19991217
US 2000-213051P	P	20000621
US 2000-598821	A	20000621
WO 2001-US19745	W	20010620

OS MARPAT 139:164710  
GI



AB [Title compds. I; M = CH<sub>2</sub>, CHR5, CHR13, CR13R13, CR5R13; Q = CH<sub>2</sub>, CHR5, CHR13, CR13R13, CR5R13; J, L = CH<sub>2</sub>, CHR5, CHR6, CR6R6, CR5R6; Z = O, S; M = CH<sub>2</sub>, CHR5, CHR13, CR13R13, CR5R13; K = CHR5, CR5R6; Z = O, S; E = (CHR7)(CHR9)v(CR11R12); R1, R2 = H, alkyl, alkenyl, alkynyl, (substituted) alkylcycloalkyl; R2R3 = atoms to form a (substituted) 5-7 membered ring; R3, R5 = (substituted) (alkyl)cycloalkyl, (alkyl)heterocyclyl; R4 = null, O, alkyl, alkenyl, alkynyl, etc.; R4 with R7, R9, or R11 = atoms to form a 5-7 membered ring; R6 = alkyl, alkenyl, alkynyl, etc.; R7, R9 = H; R4R7, R4R9 = (substituted) spirocyclyl; R13 = alkyl, alkenyl, alkynyl, cycloalkyl, etc.; R11R12 = pyrrolidinyl, tetrahydrofuryl, piperidinyl, tetrahydropyranyl; v = 1, 2], were prepared as modulators of chemokine activity (no data) for preventing asthma and other allergic diseases. Thus, 4-benzyl-1-(3-aminopropyl)piperidine (preparation given) in THF was treated with 3-cyanophenyl isocyanate to give N-(3-cyanophenyl)-N'-[3-[4-(phenylmethyl)-1-piperidinyl]propyl]urea. A pharmaceutical composition comprising the compound I was claimed.

IT **275812-98-1P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidoalkylpiperidines as modulators of chemokine CCR3 receptor activity)

RN 275812-98-1 CAPLUS

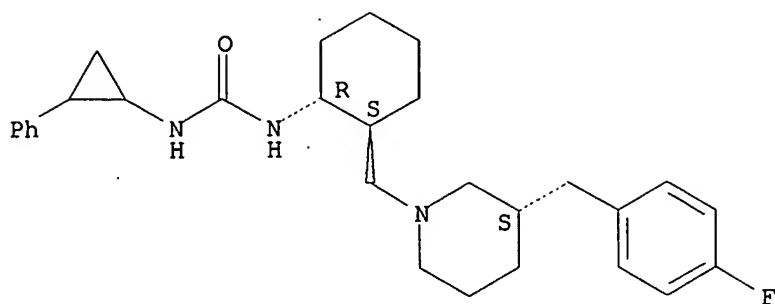
CN Urea, N-[(1R,2S)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0

CMF C29 H38 F N3 O

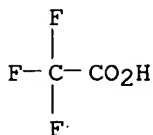
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:150534 CAPLUS

DN 138:204946

TI Preparation of N-ureidoalkylpiperidines as modulators of CCR3 chemokine  
receptor activity for the prevention of asthma and other allergic diseases  
IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Kim, Ui Tae; Wacker, Dean  
A.; Zheng, Changsheng

PA Bristol-Myers Squibb Pharma Company, USA

SO U.S., 126 pp., Cont.-in-part of U.S. Ser. No. 466,442.

CODEN: USXXAM

DT Patent

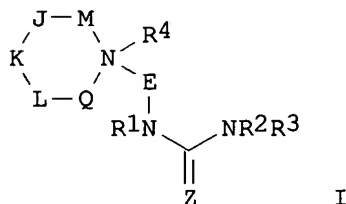
LA English

FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6525069	B1	20030225	US 2000-597400	20000621
	US 6331541	B1	20011218	US 1999-465288	19991217
	US 6444686	B1	20020903	US 1999-466442	19991217
	ZA 2001003756	A	20020509	ZA 2001-3756	20010509
	CA 2413421	AA	20011227	CA 2001-2413421	20010620
	WO 2001098270	A2	20011227	WO 2001-US19752	20010620
	WO 2001098270	A3	20020530		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP	1294690	A2	20030326	EP 2001-950360	20010620

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004516238	T2	20040603	JP 2002-504226	20010620
US 2003013741	A1	20030116	US 2001-7172	20011023
US 6521592	B2	20030218		
US 2003114489	A1	20030619	US 2002-180869	20020626
US 6897234	B2	20050524		
US 2004002515	A1	20040101	US 2002-279416	20021024
US 6875776	B2	20050405		
US 2004006107	A1	20040108	US 2002-279231	20021024
US 6780857	B2	20040824		
US 2004034063	A1	20040219	US 2003-359443	20030206
US 2005096325	A1	20050505	US 2004-983367	20041108
PRAI US 1998-112717P	P	19981218		
US 1999-161221P	P	19991022		
US 1999-466442	A2	19991217		
US 1999-161137P	P	19991022		
US 1999-161184P	P	19991022		
US 1999-161222P	P	19991022		
US 1999-465287	A3	19991217		
US 1999-465288	A3	19991217		
US 1999-465948	A3	19991217		
US 2000-213208P	P	20000621		
US 2000-597400	A	20000621		
WO 2001-US19752	W	20010620		
US 2002-180869	A1	20020626		
OS MARPAT 138:204946				
GI				



AB Title compds. [I; M, Q = CH<sub>2</sub>, CHR<sub>5</sub>, CHR<sub>13</sub>, CR<sub>13</sub>R<sub>13</sub>, CR<sub>5</sub>R<sub>13</sub>; J, K, L = CH<sub>2</sub>, CHR<sub>5</sub>, CHR<sub>6</sub>, CR<sub>6</sub>R<sub>6</sub>, CR<sub>5</sub>R<sub>6</sub>; ≥1 of J, K, L contains R<sub>5</sub>; Z = O, S, NR<sub>1a</sub>, CHCN, CHNO<sub>2</sub>, C(CN)<sub>2</sub>; R<sub>1a</sub> = H, alkyl, cycloalkyl, CN, NO<sub>2</sub>, etc.; E = (substituted) C<sub>3</sub>-6 carbocyclyl, methylenecarbocyclyl, ethylenecarbocyclyl, etc.; R<sub>1</sub>, R<sub>2</sub> = H, alkyl, alkenyl, alkynyl; R<sub>3</sub> = (substituted) alkyl, alkenyl, alkynyl; R<sub>4</sub> = null, N-oxide, alkyl, alkenyl, alkynyl, cycloalkylalkyl, etc.; R<sub>5</sub> = (substituted) alkylencarbocyclyl, alkyleneheterocyclyl; R<sub>6</sub> = alkyl, alkenyl, alkynyl, alkylcycloalkyl, perfluoroalkyl, hydroxyalkyl, mercaptoalkyl, aminoalkyl, CN, etc.; R<sub>13</sub> = alkyl, alkenyl, alkynyl, cycloalkyl, perfluoroalkyl, aminoalkyl, hydroxyalkyl, carboxyalkyl, mercaptoalkyl, acylaminoalkyl, (substituted) phenylalkyl, etc.], were prepared as CCR<sub>3</sub> modulators (no data). Thus, 4-benzyl-1-(3-aminopropyl)piperidine (preparation given) and 3-cyanophenyl isocyanate were stirred 30 min. in THF to give N-3-cyanophenyl-N'-[3-[4-(phenylmethyl)-1-piperidinyl]propyl]urea.

IT 275812-98-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-ureidoalkylpiperidines as modulators of chemokine receptor activity)

RN 275812-98-1 CAPLUS

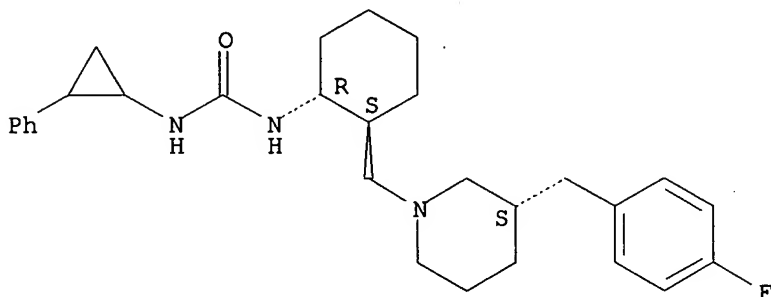
CN Urea, N-[(1R,2S)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl)methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0

CMF C29 H38 F N3 O

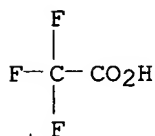
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:935575 CAPLUS

DN 136:69739

TI Préparation of piperidinoalkylureas as chemokine receptor modulators

IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Kim, Ui Tae; Wacker, Dean A.; Zheng, Changsheng

PA Dupont Pharmaceuticals Company, USA

SO PCT Int. Appl., 333 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 10

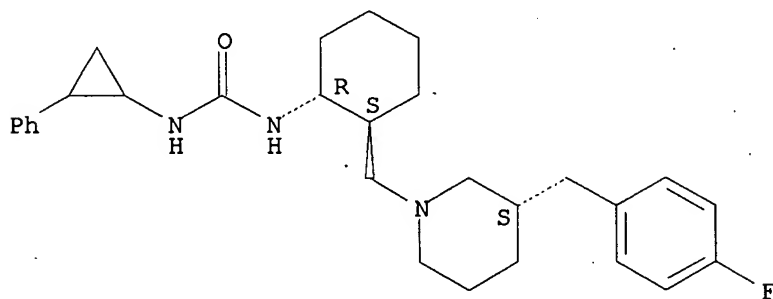
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PI	WO 2001098270	A2	20011227	WO 2001-US19752	20010620
	WO 2001098270	A3	20020530		
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ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 US 6525069 B1 20030225 US 2000-597400 20000621  
 CA 2413421 AA 20011227 CA 2001-2413421 20010620  
 EP 1294690 A2 20030326 EP 2001-950360 20010620  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 JP 2004516238 T2 20040603 JP 2002-504226 20010620  
 PRAI US 2000-213208P P 20000621  
 US 2000-597400 A 20000621  
 US 1998-112717P P 19981218  
 US 1999-161221P P 19991022  
 US 1999-466442 A2 19991217  
 WO 2001-US19752 W 20010620  
 OS MARPAT 136:69739  
 AB The title compds. were prepared as chemokine receptor modulators (no data).  
 Thus, PhCH<sub>2</sub>Z(CH<sub>2</sub>)<sub>3</sub>NHR (Z = piperidine-4,1-diyl) (I; R = H) (preparation given)  
 was amidated by 3-(NC)C<sub>6</sub>H<sub>4</sub>NCO to give I [R = CONHC<sub>6</sub>H<sub>4</sub>(CN)-3].  
 IT **275812-98-1P**  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)  
 (preparation of piperidinoalkylureas as chemokine receptor modulators)  
 RN 275812-98-1 CAPLUS  
 CN Urea, N-[(1R,2S)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-  
 piperidinyl)methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-,  
 mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

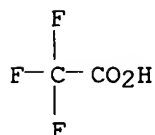
CRN 275812-97-0  
 CMF C29 H38 F N3 O

Absolute stereochemistry.



CM 2

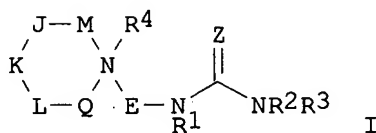
CRN 76-05-1  
 CMF C2 H F3 O2





L3 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2001:935574 CAPLUS  
 DN 136:69738  
 TI Preparation of ureidoalkylpiperidines as modulators of chemokine CCR3  
 receptor activity.  
 IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Santella, Joseph B.;  
 Wacker, Dean A.; Yao, Wenqing  
 PA Dupont Pharmaceuticals Company, USA; Bristol-Myers Squibb Pharmaceutical  
 Co.  
 SO PCT Int. Appl., 446 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001098269	A2	20011227	WO 2001-US19745	20010620
	WO 2001098269	A3	20030710		
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	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6605623	B1	20030812	US 2000-598821	20000621
	CA 2413274	AA	20011227	CA 2001-2413274	20010620
	EP 1363881	A2	20031126	EP 2001-950358	20010620
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR			
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PRAI	US 2000-213051P	P	20000621		
	US 2000-598821	A	20000621		
	US 1998-112717P	P	19981218		
	US 1999-161243P	P	19991022		
	US 1999-465286	B2	19991217		
	WO 2001-US19745	W	20010620		
OS	MARPAT 136:69738				
GI					



AB [Title compds. I; M = CH<sub>2</sub>, CHR<sub>5</sub>, CHR<sub>13</sub>, CR<sub>13R13</sub>, CR<sub>5R13</sub>; Q = CH<sub>2</sub>, CHR<sub>5</sub>, CHR<sub>13</sub>, CR<sub>13R13</sub>, CR<sub>5R13</sub>; J, L = CH<sub>2</sub>, CHR<sub>5</sub>, CHR<sub>6</sub>, CR<sub>6R6</sub>, CR<sub>5R6</sub>; Z = O, S; M = CH<sub>2</sub>, CHR<sub>5</sub>, CHR<sub>13</sub>, CR<sub>13R13</sub>, CR<sub>5R13</sub>; K = CHR<sub>5</sub>, CR<sub>5R6</sub>; Z = O, S; E = (CHR<sub>7</sub>)(CHR<sub>9</sub>)v(CR<sub>11R12</sub>); R<sub>1</sub>, R<sub>2</sub> = H, alkyl, alkenyl, alkynyl, (substituted) alkylcycloalkyl; R<sub>2</sub>R<sub>3</sub> = atoms to form a (substituted) 5-7 membered ring; R<sub>3</sub>, R<sub>5</sub> = (substituted) (alkyl)cycloalkyl, (alkyl)heterocyclyl; R<sub>4</sub> = null, O, alkyl, alkenyl, alkynyl, etc.; R<sub>4</sub> with R<sub>7</sub>, R<sub>9</sub>, or R<sub>11</sub> = atoms to form a

5-7 membered ring; R7, R9 = H; R4R7, R4R9 = (substituted) spirocyclyl; R13 = alkyl, alkenyl, alkynyl, cycloalkyl, etc.; R11R12 = pyrrolidinyl, tetrahydrofuryl, piperidinyl, tetrahydropyranyl; v = 1, 2], were prepared as modulators of chemokine activity (no data). Thus, 4-benzyl-1-(3-aminopropyl)piperidine (preparation given) in THF was treated with 3-cyanophenyl isocyanate to give N-(3-cyanophenyl)-N'-[3-[4-(phenylmethyl)-1-piperidinyl]propyl]urea.

IT 275812-98-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidoalkylpiperidines as modulators of chemokine CCR3 receptor activity)

RN 275812-98-1 CAPLUS

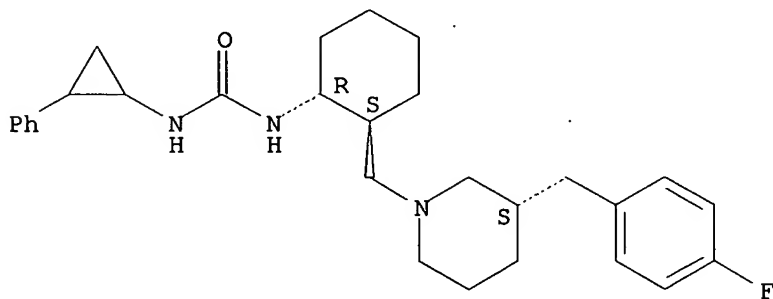
CN Urea, N-[(1R,2S)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0

CMF C29 H38 F N3 O

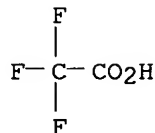
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



L3 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:824211 CAPLUS

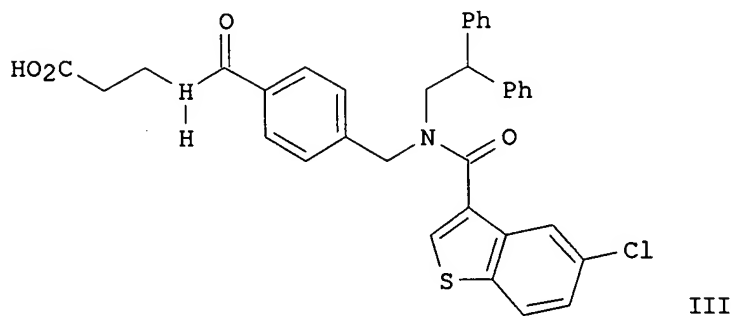
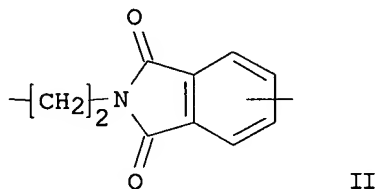
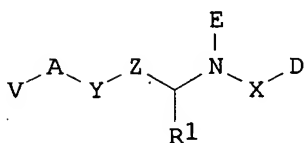
DN 134:4764

TI Preparation of 3-(benzoylamino)propionic acid derivatives as glucagon antagonists/inverse agonists

IN Ling, Anthony; Plewe, Michael Bruno; Truesdale, Larry Kenneth; Lau, Jesper; Madsen, Peter; Sams, Christian; Behrens, Carsten; Vagner, Josef; Christensen, Inge Thoger; Lundt, Behrend Frederik; Sidelmann, Ulla Grove; Thogersen, Henning

PA Novo Nordisk A/S, Den.; Agouron Pharmaceuticals, Inc.  
 SO PCT Int. Appl., 564 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000069810	A1	20001123	WO 2000-DK264	20000516
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	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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	EP 1183229	A1	20020306	EP 2000-926725	20000516
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	JP 2002544254	T2	20021224	JP 2000-618228	20000516
	ZA 2001008560	A	20020613	ZA 2001-8560	20011018
	NO 2001005607	A	20020117	NO 2001-5607	20011116
	US 2003220350	A1	20031127	US 2002-233851	20020830
	US 6875760	B2	20050405		
PRAI	DK 1999-684	A	19990517		
	DK 2000-478	A	20000321		
	US 1999-134415P	P	19990517		
	US 2000-191685P	P	20000323		
	US 2000-572553	A3	20000516		
	WO 2000-DK264	W	20000516		
OS	MARPAT 134:4764				
GI					



AB The title compds. [I; V = CO<sub>2</sub>R<sub>2</sub>, CONR<sub>2</sub>R<sub>3</sub>, CONR<sub>2</sub>OR<sub>3</sub>, etc. (wherein R<sub>2</sub>, R<sub>3</sub> = H, alkyl); A = (CH<sub>2</sub>)<sub>n</sub>(CR<sub>8</sub>R<sub>9</sub>)bNR<sub>7</sub>, (CR<sub>8</sub>R<sub>9</sub>)b(CH<sub>2</sub>)<sub>n</sub>NR<sub>7</sub>, (CR<sub>8</sub>R<sub>9</sub>)b(CH<sub>2</sub>)<sub>n</sub>, etc. (b = 0-1; n = 0-3; R<sub>7</sub> = H, alkyl, (cycloalkyl)alkyl; R<sub>8</sub>, R<sub>9</sub> = H, alkyl); Y = CO, SO<sub>2</sub>, O, a bond; Z = (un)substituted phenylene, divalent radical derived from 5-6 membered heteroarom. ring containing 1-2 heteroatoms selected from N, O and S; or AYZ together = II; R<sub>1</sub> = H, alkyl; X = CO(CR<sub>13</sub>R<sub>14</sub>)r(CH<sub>2</sub>)<sub>s</sub>, SO<sub>2</sub>(CR<sub>13</sub>R<sub>14</sub>)r(CH<sub>2</sub>)<sub>s</sub>, CO<sub>2</sub>(CR<sub>13</sub>R<sub>14</sub>)r(CH<sub>2</sub>)<sub>s</sub>, etc. (r = 0-1; s = 0-3; R<sub>13</sub>, R<sub>14</sub> = H, alkyl); D = (un)substituted Ph, pyridyl, cyclopropyl, etc.; E = (un)substituted quinolinyl, 2,5-dioxopiperidinyl, biphenylalkyl, etc.] which act to antagonize the action of the glucagon hormone on the glucagon receptor (data given), and therefore may be suitable for the treatment and/or prevention of any glucagon-mediated conditions and diseases such as hyperglycemia, Type 1 diabetes, Type 2 diabetes and obesity, were prepared and formulated. E.g., a multi-step solid phase synthesis of III was given. Compds. I are effective at 0.05-10 mg/kg/day.

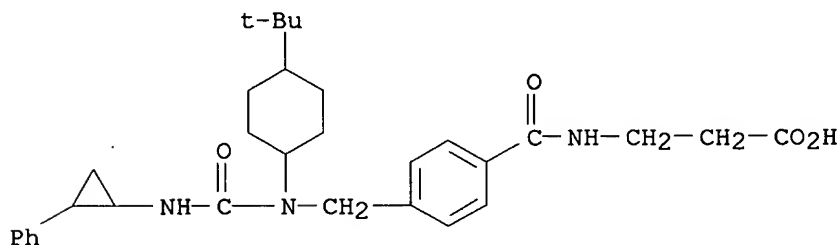
IT 307983-80-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of 3-(benzoylamino)propionic acid derivs. as glucagon antagonists/inverse agonists)

RN 307983-80-8 CAPLUS

CN β-Alanine, N-[4-[[[4-(1,1-dimethylethyl)cyclohexyl]][(2-phenylcyclopropyl)amino]carbonyl]amino]methyl]benzoyl]- (9CI) (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:420964 CAPLUS

DN 133:43445

TI Preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity

IN Ko, Soo S.; Duncia, John V. K.; Santella, Joseph B., III; Wacker, Dean A.; Kim, Ui Tae

PA Du Pont Pharmaceuticals Company, USA

SO PCT Int. Appl., 351 pp.

CODEN: PIXXD2

DT Patent

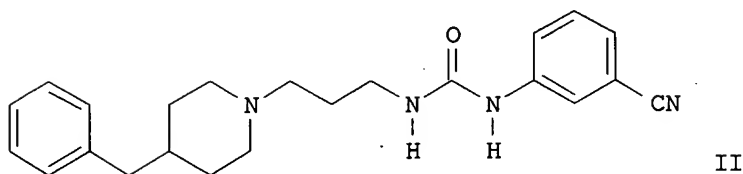
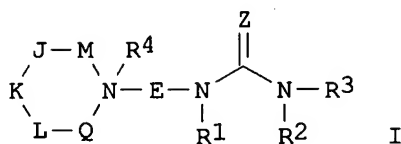
LA English

FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000035454	A1	20000622	WO 1999-US30336	19991217
	W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE

CA 2348923	AA	20000622	CA 1999-2348923	19991217
EP 1140087	A1	20011010	EP 1999-965322	19991217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6331541	B1	20011218	US 1999-465288	19991217
US 6492400	B1	20021210	US 1999-465287	19991217
ZA 2001003756	A	20020509	ZA 2001-3756	20010509
US 2003013741	A1	20030116	US 2001-7172	20011023
US 6521592	B2	20030218		
US 2004002515	A1	20040101	US 2002-279416	20021024
US 6875776	B2	20050405		
US 2004006107	A1	20040108	US 2002-279231	20021024
US 6780857	B2	20040824		
PRAI US 1998-112717P	P	19981218		
US 1999-161184P	P	19991022		
US 1999-161137P	P	19991022		
US 1999-161222P	P	19991022		
US 1999-465287	A3	19991217		
US 1999-465288	A3	19991217		
US 1999-465948	A3	19991217		
WO 1999-US30336	W	19991217		
OS MARPAT 133:43445				
GI				



AB The title compds. [I; M = absent, CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Q = CH<sub>2</sub>, CHR<sub>5</sub>, etc.; J, K, L = CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Z = O, S; E = (CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>, CH<sub>2</sub>CH(OH)CH(Ph), etc.; R<sub>1</sub>, R<sub>2</sub> = H, alkyl, alkenyl, etc.; R<sub>2</sub> and R<sub>3</sub> may join to form (un)substituted 5-7 membered ring; R<sub>3</sub> = (un)substituted Ph, naphthyl, adamantyl, etc.; R<sub>4</sub> = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at 1.0-20 mg/kg/da (oral dosage).

IT **275812-98-1P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)

RN 275812-98-1 CAPLUS

CN Urea, N-[(1R,2S)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-,

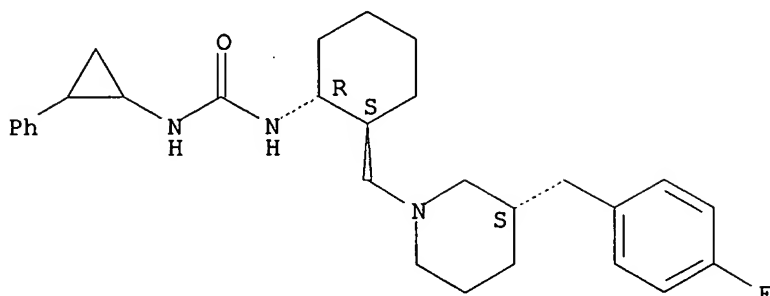
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0

CMF C29 H38 F N3 O

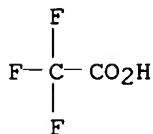
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:420963 CAPLUS

DN 133:43444

TI Preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity

IN Ko, Soo; Clark, Cheryl Mcardle; Delucca, George V.; Duncia, John V.; Santella, Joseph B., III; Wacker, Dean A.

PA Du Pont Pharmaceuticals Co., USA

SO PCT Int. Appl., 316 pp.

CODEN: PIXXD2

DT Patent

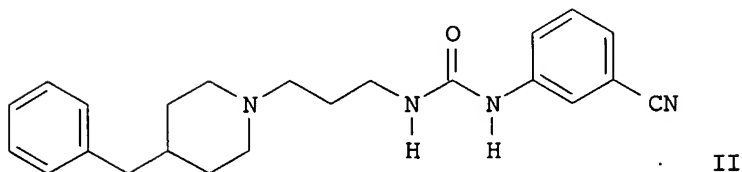
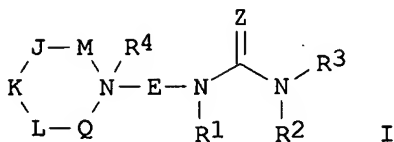
LA English

FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000035453	A1	20000622	WO 1999-US30335	19991217
	W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2347909	AA	20000622	CA 1999-2347909	19991217
	EP 1158980	A1	20011205	EP 1999-965321	19991217

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

US 6331541	B1	20011218	US 1999-465288	19991217
US 6486180	B1	20021126	US 1999-465948	19991217
ZA 2001003756	A	20020509	ZA 2001-3756	20010509
US 2003013741	A1	20030116	US 2001-7172	20011023
US 6521592	B2	20030218		
US 2004002515	A1	20040101	US 2002-279416	20021024
US 6875776	B2	20050405		
US 2004006107	A1	20040108	US 2002-279231	20021024
US 6780857	B2	20040824		
PRAI US 1998-112717P	P	19981218		
US 1999-161137P	P	19991022		
US 1999-161184P	P	19991022		
US 1999-161222P	P	19991022		
US 1999-465287	A3	19991217		
US 1999-465288	A3	19991217		
US 1999-465948	A3	19991217		
WO 1999-US30335	W	19991217		
OS MARPAT 133:43444				
GI				



AB The title compds. [I; M = absent, CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Q = CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; J, K, L = CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Z = O, S; E = (CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>, CH<sub>2</sub>CH(OH)CH(Ph), etc.; R<sub>1</sub>, R<sub>2</sub> = H, alkyl, alkenyl, etc.; R<sub>2</sub> and R<sub>3</sub> may join to form (un)substituted 5-7 membered ring; R<sub>3</sub> = (un)substituted Ph, naphthyl, adamantyl, etc.; R<sub>4</sub> = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at 1.0-20 mg/kg/day (oral dosage).

IT **275812-98-1P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)

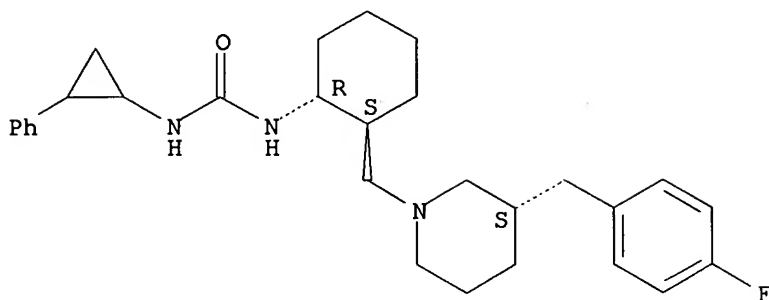
RN 275812-98-1 CAPLUS

CN Urea, N-[(1R,2S)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

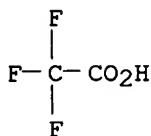
CRN 275812-97-0  
CMF C29 H38 F N3 O

Absolute stereochemistry.



CM 2

CRN 76-05-1  
CMF C2 H F3 O2



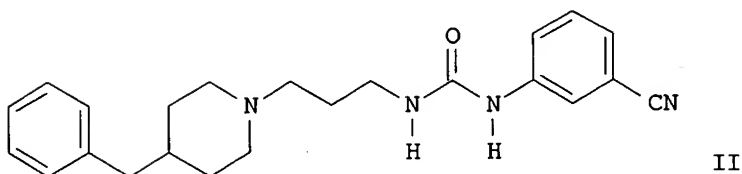
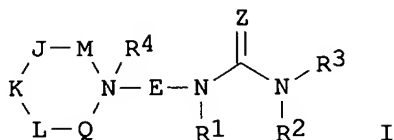
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:420962 CAPLUS  
DN 133:43443  
TI Preparation of N-ureidoalkyl-piperidines as modulators of chemokine  
receptor activity  
IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Kim, Ui Tae; Santella,  
Joseph B. Iii; Wacker, Dean A. K.  
PA Du Pont Pharmaceuticals Company, USA  
SO PCT Int. Appl., 388 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000035452	A1	20000622	WO 1999-US30334	19991217
	W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2347770	AA	20000622	CA 1999-2347770	19991217
	EP 1161240	A1	20011212	EP 1999-963107	19991217
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
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	TR 200101859	T2	20011221	TR 2001-200101859	19991217



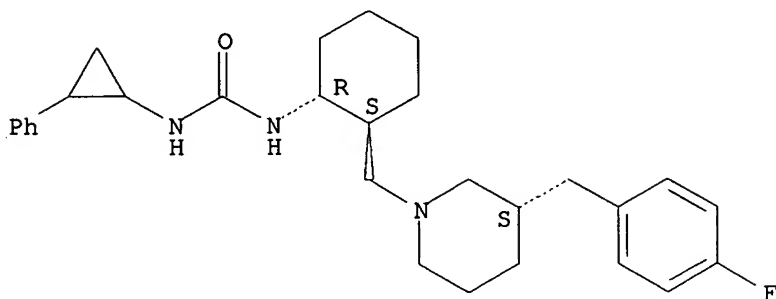
	BR 9917038	A	20020402	BR 1999-17038	19991217
	JP 2002532427	T2	20021002	JP 2000-587772	19991217
	NZ 511394	A	20030725	NZ 1999-511394	19991217
	AU 770042	B2	20040212	AU 2000-19406	19991217
	ZA 2001003756	A	20020509	ZA 2001-3756	20010509
	NO 2001002977	A	20010820	NO 2001-2977	20010615
	US 2003013741	A1	20030116	US 2001-7172	20011023
	US 6521592	B2	20030218		
	US 2004002515	A1	20040101	US 2002-279416	20021024
	US 6875776	B2	20050405		
	US 2004006107	A1	20040108	US 2002-279231	20021024
	US 6780857	B2	20040824		
	US 2005096325	A1	20050505	US 2004-983367	20041108
PRAI	US 1998-112717P	P	19981218		
	US 1999-161221P	P	19991022		
	US 1999-161137P	P	19991022		
	US 1999-161184P	P	19991022		
	US 1999-161222P	P	19991022		
	US 1999-465287	A3	19991217		
	US 1999-465288	A3	19991217		
	US 1999-465948	A3	19991217		
	US 1999-466442	A3	19991217		
	WO 1999-US30334	W	19991217		
	US 2002-180869	A1	20020626		
OS	MARPAT 133:43443				
GI					



- AB The title compds. [I; M = absent, CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Q = CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; J, K, L = CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Z = O, S; E = (CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>, CH<sub>2</sub>CH(OH)CH(Ph), etc.; R<sub>1</sub>, R<sub>2</sub> = H, alkyl, alkenyl, etc.; R<sub>2</sub> and R<sub>3</sub> may join to form (un)substituted 5-7 membered ring; R<sub>3</sub> = (un)substituted Ph, naphthyl, adamantyl, etc.; R<sub>4</sub> = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at 1.0-20 mg/kg/day (oral dosage).
- IT **275812-97-0P 275812-98-1P**  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)
- RN 275812-97-0 CAPLUS
- CN Urea, N-[(1R,2S)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-

piperidinyl)methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 275812-98-1 CAPLUS

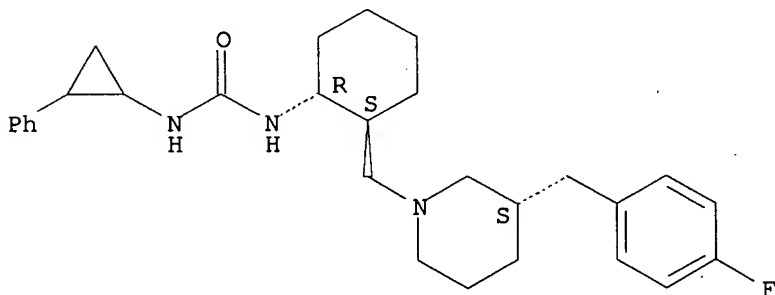
CN Urea, N-[(1R,2S)-2-[[ (3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl)methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0

CMF C29 H38 F N3 O

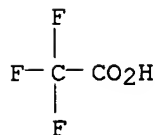
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2

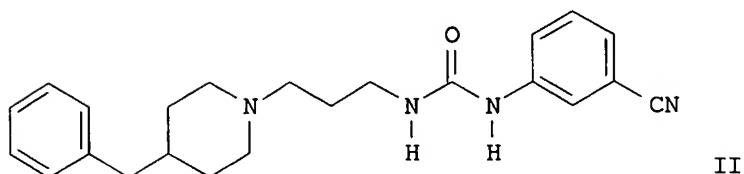
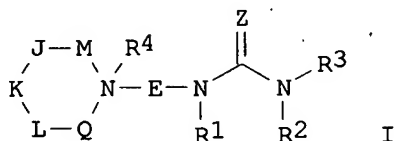


RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:420961 CAPLUS

DN 133:43442  
 TI Preparation of N-ureidoalkyl-piperidines as modulators of chemokine  
 receptor activity  
 IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Santella, Joseph B., III;  
 Wacker, Dean A.; Watson, Paul S.; Varnes, Jeffrey G.  
 PA Du Pont Pharmaceuticals Company, USA  
 SO PCT Int. Appl., 394 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000035451	A1	20000622	WO 1999-US30332	19991217
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	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2350730	AA	20000622	CA 1999-2350730	19991217
	EP 1140086	A1	20011010	EP 1999-964297	19991217
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6331541	B1	20011218	US 1999-465288	19991217
	ZA 2001003756	A	20020509	ZA 2001-3756	20010509
	US 2003013741	A1	20030116	US 2001-7172	20011023
	US 6521592	B2	20030218		
	US 2004002515	A1	20040101	US 2002-279416	20021024
	US 6875776	B2	20050405		
	US 2004006107	A1	20040108	US 2002-279231	20021024
	US 6780857	B2	20040824		
PRAI	US 1998-112717P	P	19981218		
	US 1999-161243P	P	19991022		
	US 1999-161137P	P	19991022		
	US 1999-161184P	P	19991022		
	US 1999-161222P	P	19991022		
	US 1999-465287	A3	19991217		
	US 1999-465288	A3	19991217		
	US 1999-465948	A3	19991217		
	WO 1999-US30332	W	19991217		
OS	MARPAT 133:43442				
GI					



AB The title compds. [I; M = absent, CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Q = CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; J, K, L = CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Z = O, S; E = (CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>, CH<sub>2</sub>CH(OH)CH(Ph), etc.; R<sub>1</sub>, R<sub>2</sub> = H, alkyl, alkenyl, etc.; R<sub>2</sub> and R<sub>3</sub> may join to form (un)substituted 5-7 membered ring; R<sub>3</sub> = (un)substituted Ph, naphthyl, adamantyl, etc.; R<sub>4</sub> = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at 1.0-20 mg/kg/day (oral dosage).

IT 275812-98-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)

RN 275812-98-1 CAPLUS

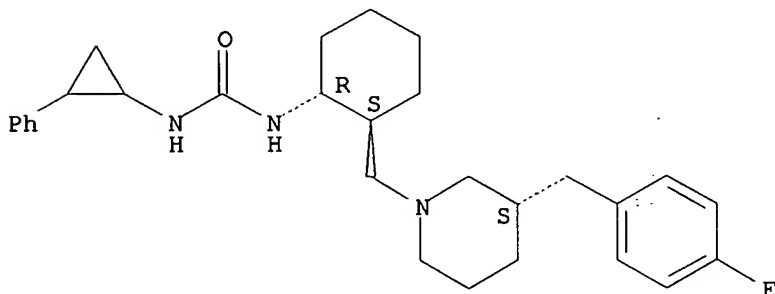
CN Urea, N-[(1R,2S)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl)methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0

CMF C29 H38 F N3 O

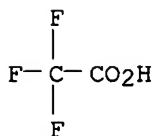
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:420959 CAPLUS

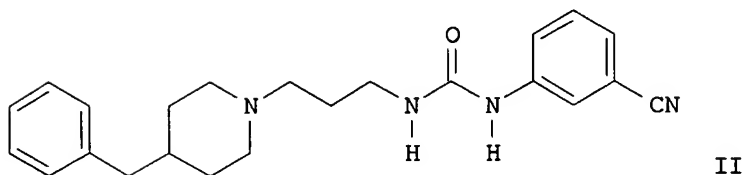
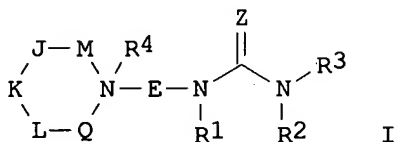
DN 133:43441

TI Preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity

IN Ko, Soo S.; Delucca, George V.; Duncia, John V.; Santella, Joseph B., III;

Gardner, Daniel S.  
 PA Du Pont Pharmaceuticals Company, USA  
 SO PCT Int. Appl., 327 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000035449	A1	20000622	WO 1999-US30292	19991217
	W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2346933	AA	20000622	CA 1999-2346933	19991217
	EP 1156807	A1	20011128	EP 1999-968144	19991217
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6331541	B1	20011218	US 1999-465288	19991217
	TR 200101859	T2	20011221	TR 2001-200101859	19991217
	ZA 2001003756	A	20020509	ZA 2001-3756	20010509
	US 2003013741	A1	20030116	US 2001-7172	20011023
	US 6521592	B2	20030218		
	US 2004002515	A1	20040101	US 2002-279416	20021024
	US 6875776	B2	20050405		
	US 2004006107	A1	20040108	US 2002-279231	20021024
	US 6780857	B2	20040824		
	US 2005096325	A1	20050505	US 2004-983367	20041108
PRAI	US 1998-112717P	P	19981218		
	US 1999-161221P	P	19991022		
	US 1999-161122P	P	19991022		
	US 1999-161137P	P	19991022		
	US 1999-161184P	P	19991022		
	US 1999-161222P	P	19991022		
	US 1999-465287	A3	19991217		
	US 1999-465288	A3	19991217		
	US 1999-465948	A3	19991217		
	US 1999-466442	A3	19991217		
	WO 1999-US30292	W	19991217		
	US 2002-180869	A1	20020626		
OS	MARPAT 133:43441				
GI					



AB The title compds. [I; M = absent, CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Q = CH<sub>2</sub>, CHR<sub>5</sub>, etc.; J, K, L = CH<sub>2</sub>, CH(CH<sub>2</sub>Ph), etc.; Z = O, S; E = (CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>, CH<sub>2</sub>CH(OH)CH(Ph), etc.; R<sub>1</sub>, R<sub>2</sub> = H, alkyl, alkenyl, etc.; R<sub>2</sub> and R<sub>3</sub> may join to form (un)substituted 5-7. membered ring; R<sub>3</sub> = (un)substituted Ph, naphthyl, adamantyl, etc.; R<sub>4</sub> = absent, alkyl, alkenyl, etc.], modulators of CCR3 useful for the prevention of asthma and other allergic diseases, were prepared and formulated. E.g., a multi-step synthesis of II was given. Compds. I are effective at 1.0-20 mg/kg/day (oral dosage).

IT **275812-98-1P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)

RN 275812-98-1 CAPLUS

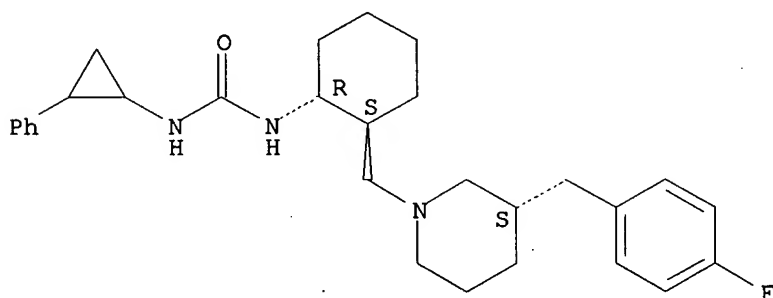
CN Urea, N-[(1R,2S)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-(2-phenylcyclopropyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 275812-97-0

CMF C29 H38 F N3 O

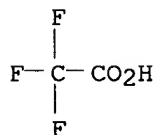
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN

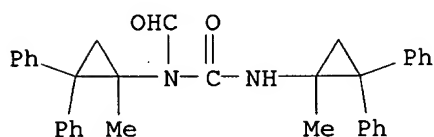
AN 1972:84961 CAPLUS

DN 76:84961

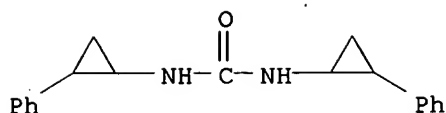
TI Synthesis of isonitriles

AU Walborsky, H. M.; Niznik, G. E.

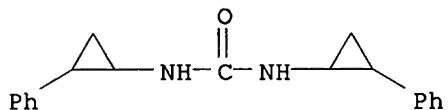
CS Dep. Chem., Florida State Univ., Tallahassee, FL, USA  
 SO Journal of Organic Chemistry (1972), 37(2), 187-90  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 OS CASREACT 76:84961  
 AB A synthesis of iso-nitriles was devised using a DMF solution of chlorodimethylfor-miminium chloride, prepared in situ from SOCl<sub>2</sub> and DMF, to dehydrate formamides. This procedure is applicable in the preparation of aliphatic, alicyclic, vinylic, and aromatic isonitriles. The reduction of isocyanates with LiAlH(OBu-tert)<sub>3</sub> to formamides was described.  
 IT **32529-00-3P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 32529-00-3 CAPLUS  
 CN Urea, N-formyl-N,N'-bis(1-methyl-2,2-diphenylcyclopropyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1966:468519 CAPLUS  
 DN 65:68519  
 OREF 65:12792c-e  
 TI Cytokinin activity of some substituted ureas and thioureas  
 AU Bruce, M. I.; Zwar, J. A.  
 CS Div. Plant Ind., C.S.I.R.O., Canberra, Australia  
 SO Proc. Roy. Soc. (London), Ser. B. (1966), 165(999), 245-65  
 DT Journal  
 LA English  
 AB N,N'-Diphenylurea had reproducible cytokinin activity. N-Monosubstituted and N,N'-disubstituted ureas (500) were examined, and .apprx.250 were active. The following generalizations were made with regard to the correlation of chemical structure with biol. activity: (1) phenylurea was the simplest active compound; (2) an HNCONH bridge conferred higher activity than an HNCNH bridge; (3) compds. in which both amino H atoms on 1 or both sides of the bridge were substituted were of low activity or were inactive; (4) ring substitution on the bridge (RNHCONH<sub>2</sub>, R = substituted phenyl ring) increased the activity, and meta substitutions gave highest activity, while ortho substitutions gave lowest activity; (5) compds. with electron-attracting substituents were more active than those with electron-donating substituents; (6) pyridyl compds. were active, but compds. with non-planar rings were inactive; and (7) in compds. of the type RNHCONHR', where R and R' were phenyl or substituted phenyl groups, compds. having 1 unsubstituted phenyl ring had higher activities than those having 2 substituted phenyl groups. Some ureas showed detectable activity at 0.1 ppm., which was .apprx.4-fold less active than kinetin in the tobacco pith assay.  
 IT **13201-82-6**, Urea, 1,3-bis(2-phenylcyclopropyl)-, trans,trans-  
 (plant regulator activity of)  
 RN 13201-82-6 CAPLUS  
 CN Urea, 1,3-bis(2-phenylcyclopropyl)-, trans,trans- (8CI) (CA INDEX NAME)

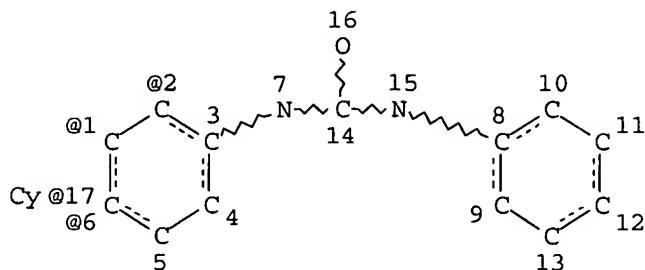


L3 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1966:468518 CAPLUS  
 DN 65:68518  
 OREF 65:12792b-c  
 TI Effect of gibberellic acid on growth of woody ground-cover plants  
 AU Kemmerer, Harleigh; Butler, J. D.  
 CS Univ. of Illinois, Urbana  
 SO Proceedings of the American Society for Horticultural Science (1966), 88,  
 698-702  
 CODEN: PASHA6; ISSN: 0099-4065  
 DT Journal  
 LA English  
 AB Two-year-old plants of *Euonymus fortunei coloratus*, *Vinca minor*, *Celastrus scandens*, and *Juniperus horizontalis plumosa* were sprayed with gibberellic acid at 1 application of 100 and 1000 ppm., and 100 ppm. weekly, over 3 months. Some of the treatments stimulated shoot production. Treated *V. minor* developed chlorosis that could not be overcome with addnl. fertilizer or chelated Fe. The chlorotic foliage eventually died. Juniper plants also were injured by the sprays.  
 IT 13201-82-6, Urea, 1,3-bis(2-phenylcyclopropyl)-, trans,trans-  
 (plant regulator activity of)  
 RN 13201-82-6 CAPLUS  
 CN Urea, 1,3-bis(2-phenylcyclopropyl)-, trans,trans- (8CI) (CA INDEX NAME)





=> d 15  
 L5 HAS NO ANSWERS  
 L5 STR



VPA 17-2/1/6 U  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

=> s 15 ful  
 FULL SEARCH INITIATED 11:11:34 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 122999 TO ITERATE

100.0% PROCESSED 122999 ITERATIONS  
 SEARCH TIME: 00.00.06

5 ANSWERS

L7 5 SEA SSS FUL L5

=> fil caplus  
 COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	163.48	163.69

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 FILE LAST UPDATED: 28 Jun 2005 (20050628/ED)

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substance identification.

=> s 17

L8 5 L7

=> d bib abs hitstr 1-5

L8 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:1127328 CAPLUS

DN 142:74457

TI Preparation of ureidocyclohexylmethylpiperidines as modulators of chemokine receptor activity.

IN Delucca, George V.; Ko, Soo S.

PA Bristol-Myers Squibb Company, USA

SO PCT Int. Appl., 140 pp.

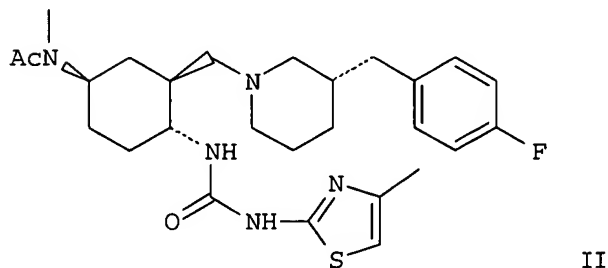
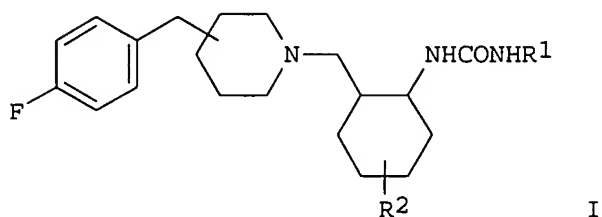
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004110993	A2	20041223	WO 2004-US20006	20040612
	WO 2004110993	A3	20050217		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRAI	US 2003-478022P	P	20030612		
OS	MARPAT 142:74457				
GI					



AB Title compds. [I; R1 = alkyl, (substituted) carbocyclyl(alkyl), heterocyclyl(alkyl); R2 = N(R4a)2, NR4fCHO, NR4fCO2R4b, NR4fCO(CHR')rR4b, etc.; R4a = H, alkyl, alkenyl, alkynyl, (substituted) carbocyclyl(alkyl),

heterocyclyl(alkyl); (R4a)2, R4bR4f = atoms to form a 5-7 membered (substituted) heterocyclyl; R4b = alkyl, alkenyl, alkynyl, perfluoroalkyl, (substituted) carbocyclyl(alkyl), heterocyclyl(alkyl); R4f = H, alkyl, cycloalkyl, Ph; r = 0-5], were prepared as e.g. CCR-1 and CCR-3 chemokine receptor inhibitors (no data). Thus, title compound (II) was prepared in many steps from 1,4-cyclohexanedione monoethylene ketal, (S)-3-(4-fluorobenzyl)piperidine, methylamine, Ac2O, 2-amino-4-methylthiazole, and Ph chloroformate.

IT **813443-85-5P**

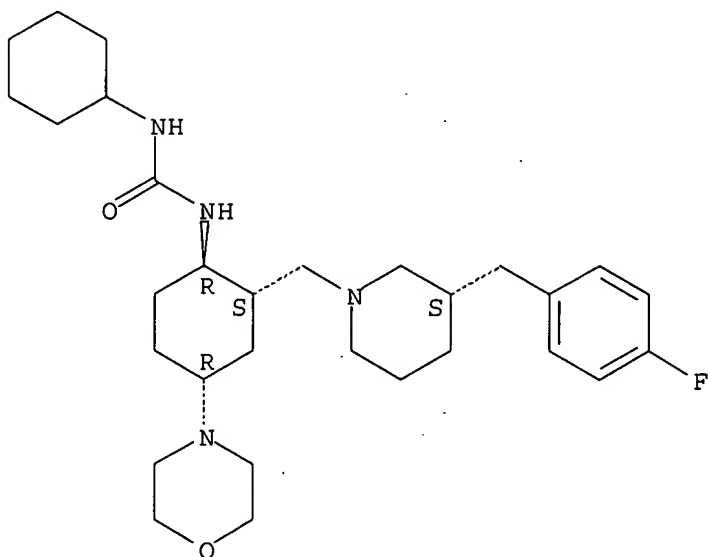
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidocyclohexylmethylpiperidines as modulators of chemokine receptor activity)

RN 813443-85-5 CAPLUS

CN Urea, N-cyclohexyl-N'-[(1R,2S,4R)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]-4-(4-morpholinyl)cyclohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:1127098 CAPLUS

DN 142:74455

TI Preparation of ureidocyclohexylmethyl(fluorobenzyl)piperidines as modulators of chemokine receptor activity.

IN Ko, Soo S.; Delucca, George V.

PA USA

SO U.S. Pat. Appl. Publ., 45 pp.

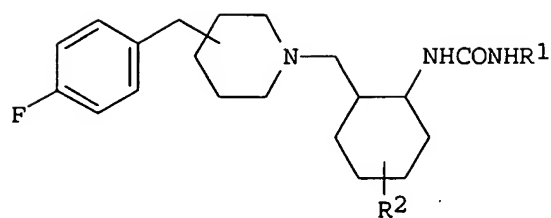
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004259914	A1	20041223	US 2004-865417	20040610
PRAI	US 2003-478022P	P	20030612		
OS	MARPAT 142:74455				
GI					



AB Title compds. [I; R1 = alkyl, (substituted) carbocyclyl(alkyl), heterocyclyl(alkyl); R2 = (substituted) amino, acylamino], were prepared as CCR1 and CCR3 inhibitors (no data). Thus, N-(1S,2R,5R)-[4-[3-(4-fluorobenzyl)piperidin-1-ylmethyl]-3-[3-(4-methylthiazol-2-yl)ureido]cyclohexyl]-N-methylacetamide was prepared in many steps from 3-ethoxy-2-cyclohexenone, di-Et carbonate, (S)-3-(4-fluorobenzyl)piperidine mandelate salt, methylamine, and (4-methylthiazol-2-yl)carbamic acid Ph ester.

IT **813443-85-5P**

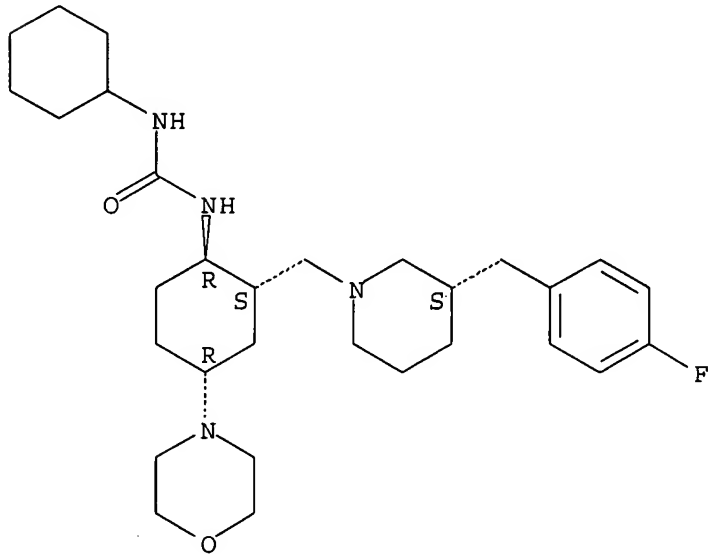
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidocyclohexylmethylpiperidines as modulators of chemokine receptor activity)

RN 813443-85-5 CAPLUS

CN Urea, N-cyclohexyl-N'-[(1R,2S,4R)-2-[[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]-4-(4-morpholinyl)cyclohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:472724 CAPLUS

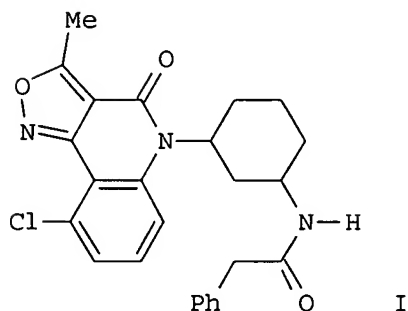
DN 135:76865

TI Preparation of N-(isoxazoloquinolinylcyclohexyl)carboxamides and analogs as MRP1 inhibitors

IN Bonjouklian, Rosanne; Cohen, Jeffrey Daniel; Gruber, Joseph Michael; Johnson, Douglas Webb; Jungheim, Louis Nickolaus; Kroin, Julian Stanley; Lander, Peter Ambrose; Lin, Ho-shen; Lohman, Mark Christopher; Muehl, Brian Stephen; Norman, Bryan Hurst; Patel, Vinod Francis; Richett, Michael Enrico; Thrasher, Kenneth Jeff; Vepachedu, Sreenivasarao; White, Wesley

Todd; Xie, Yongping; York, Jeremy Schulenburg; Parkhurst, Brandon Lee  
 PA Eli Lilly and Co., USA; Wang, Qiuping; et al.  
 SO PCT Int. Appl., 381 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001046199	A1	20010628	WO 2000-US32443	20001211
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	CA 2395513	AA	20010628	CA 2000-2395513	20001211
	EP 1250340	A1	20021023	EP 2000-986242	20001211
	EP 1250340	B1	20041117		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	JP 2003518125	T2	20030603	JP 2001-547109	20001211
	AT 282623	E	20041215	AT 2000-986242	20001211
	US 2003100576	A1	20030529	US 2002-130800	20020521
	US 6743794	B2	20040601		
	US 2004176405	A1	20040909	US 2004-797362	20040310
PRAI	US 1999-171373P	P	19991222		
	US 2000-226076P	P	20000817		
	US 2000-234539P	P	20000922		
	WO 2000-US32443	W	20001211		
	US 2002-130800	A3	20020521		
OS	MARPAT 135:76865				
GI					



AB Title compds. were prepared as MRPI inhibitors (no data). Thus, mono-N-protected cyclohexane-1,3-diamine was amidated by 3-(2-chloro-6-fluorophenyl)--5-methylisoxazole-4-carbonyl chloride and the cis-product cyclized to give, after deprotection and amidation, title compound I.

IT 347183-19-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

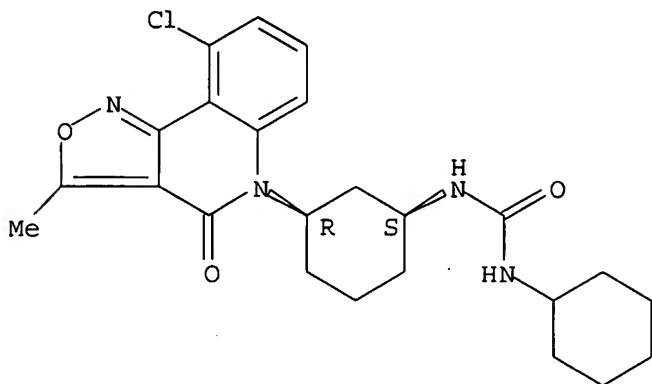
(preparation of N-isoxazoloquinolinylcyclohexylcarboxamides and analogs as

## MRP1 inhibitors)

RN 347183-19-1 CAPLUS

CN Urea, N-[(1R,3S)-3-(9-chloro-3-methyl-4-oxoisoxazolo[4,3-c]quinolin-5(4H)-yl)cyclohexyl]-N'-cyclohexyl-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1965:462817 CAPLUS

DN 63:62817

OREF 63:11461b-h,11462a-b

TI Aryltetralins

IN Rutschmann, Juerg; Schreier, Emil

PA Sandoz Ltd.

SO 32 pp.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR M3101		19650310	FR	
	GB 1046234			GB	
PRAI	CH		19620830		

GI For diagram(s), see printed CA Issue.

AB I (R' = CO<sub>2</sub>Me) (20 g.) is hydrogenated at room temperature on a 10% Pd charcoal catalyst in 300 ml. AcOH to give II (R' = CO<sub>2</sub>Me), m. 157-8°. II (R' = CO<sub>2</sub>Et), is obtained by the same procedure. A suspension of 10 g. II (R' = CO<sub>2</sub>Me) [or II (R' = CO<sub>2</sub>Et)] is refluxed in 25ml. anhydrous NH<sub>2</sub>NH<sub>2</sub> at 130° for 4 hrs. to give 7.4 g. II (R' = CONH<sub>2</sub>NH<sub>2</sub>), m. 188-9°. II (R' = CONH<sub>2</sub>NH<sub>2</sub>) (4 g.) is dissolved in a mixture of 15 ml. 2N HCl and 25 ml. AcOH. The mixture is diazotized and the crude azide is refluxed for 2 hrs. in a mixture of 20 ml. toluene and 5 ml. benzyl alc. to give the corresponding benzyl urethan, m. 182-3°. This compound is treated with H on a Pd-charcoal catalyst in AcOH to give II (R' = NH<sub>2</sub>); m. 152-3°; HCl salt m. 274-5°. II (R = NH<sub>2</sub>) (5 g.) is left overnight at room temperature in a mixture of 50 ml. MeOH and 5 ml. ethylene oxide

and the solution is further heated at 60° for 2 hrs. to give II [R' = N(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>2</sub>], m. 208-9°, which is heated at 60° for 1 hr. with 5 ml. SOCl<sub>2</sub> in 50 ml. CH<sub>2</sub>Cl<sub>2</sub> while stirring to give crude II [R' = N(CH<sub>2</sub>CH<sub>2</sub>Cl)<sub>2</sub>].HCl, which is converted into the free base, m. 140-1°; HCl salt m. 208-9°. Similarly are prepared the following compds. (R' and m.p. given): III: CO<sub>2</sub>Et, 110-11°; CONH<sub>2</sub>NH<sub>2</sub>, 178-9°; benzylurethan, 178-9°; methyl urethan, 190-1°; NH<sub>2</sub>, 109-11° (HCl salt m. 278-80°);

N(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>2</sub>, 86-7°; N(CH<sub>2</sub>CH<sub>2</sub>Cl)<sub>2</sub>, 123-4° (HCl salt m. 210-12°); IV: CONHNH<sub>2</sub>, 158-9°; benzyl urethan, 147-8°; NH<sub>2</sub>.HCl, 252-3°; N(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>2</sub>, 95-6°; N(CH<sub>2</sub>CH<sub>2</sub>Cl)<sub>2</sub>.HCl, m. 166°; V: CO<sub>2</sub>Me, 146-7°; VI: CO<sub>2</sub>Me, 98-100°; CONHNH<sub>2</sub>, 178-80°; benzyl urethan, 175-6°; NH<sub>2</sub>, 151-2° (HCl salt m. 273-4°); N(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>2</sub>, 114-15°; N(CH<sub>2</sub>CH<sub>2</sub>Cl)<sub>2</sub>, 113-14° (HCl salt m. 195-7°); VII: CO<sub>2</sub>Me, 72-3°; CONHNH<sub>2</sub>, 150-1°; benzyl urethan, 119-20°; NH<sub>2</sub>, 67-8° (HCl salt 280-1°); N(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>2</sub>, 134-5°; N(CH<sub>2</sub>CH<sub>2</sub>Cl)<sub>2</sub>, 80-1°; VIII: CO<sub>2</sub>Me, 119-20°.

Compound, X, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>; I, CO, H, --OCH<sub>2</sub>O--, MeO, MeO, MeO, II, CH<sub>2</sub>, H, --OCH<sub>2</sub>O--, MeO, MeO, MeO; III, CH<sub>2</sub>, H, MeO, MeO, MeO, MeO, MeO; IV, CH<sub>2</sub>, MeO, MeO, MeO, MeO, MeO, H; V, CO, H, MeO, MeO, MeO, MeO, H; VI, CH<sub>2</sub>, H, MeO, MeO, MeO, H; VII, CH<sub>2</sub>, H, H, H, H, H; VIII, CO, H, H, H, H, H; Diazotization of III (R' = CONHNH<sub>2</sub>) gives a product, m.

255-6, putative bis[1-(3,4,5-trimethoxyphenyl)-6,7-dimethoxy-2-tetralyl]urea. Preparation of the corresponding hydrochloride gives a compound identical to III (R' = NH<sub>2</sub>)-HCl. K (36 g.) is dissolved in 500 ml. tertBuOH (IX) by refluxing 3-4 hrs. under dry N. Then a hot solution of 198 g. 3,4,3',4',5'-pentamethoxybenzophenone and 156 ml. (CH<sub>2</sub>CO<sub>2</sub>Et)<sub>2</sub> in 300 ml. IX is added and the mixture refluxed for 2 hrs. while stirring. The solution is neutralized with 300 ml. 2N HCl and IX is evaporated under reduced pressure. The acidified solution (Congo red) is extracted with ether and the ethereal solution further extracted with 2N aqueous NaOH. This caustic

solution is

refluxed overnight and 500 ml. CHCl<sub>3</sub> is then added. The mixture is acidified with concentrate HCl to Congo red while shaking. The solution is

further

extracted with CHCl<sub>3</sub> to give the Stobbe acid, m. 172-5°.

3,3,3',4',5'-Pentamethoxybenzhydrylidenesuccinic acid (100 g.) is hydrogenated at ambient temperature in 1 l. alcohol over 4 g. Pd/C catalyst. After the absorption of 5.9 l. H the catalyst is filtered off and the crude dihydro Stobbe acid (100 g.) is collected. Crude

3,4,3',4',5'-pentamethoxybenzhydrylsuccinic acid (100 g.) is refluxed in AcCl 2 hrs. Evaporation to dryness leaves a solid which is treated with benzene. The benzene solution is neutralized with a KHCO<sub>3</sub> solution and washed.

After evaporation of the solvent, the crude anhydride (95 g.) is dissolved in 300 ml. nitrobenzene (X). To the ice cooled solution is added 60 ml. SnCl<sub>4</sub> in 100 ml. X and the mixture stirred overnight at room temperature to give 1-(3,4,5-trimethoxyphenyl)-4-oxo-6,7-dimethoxytetralin-2-carboxylic acid (XI), m. 242-3° (MeOH, EtOH). The mother liquor is evaporated under reduced pressure and the residue is treated with AcOEt to give

1-(3,4-dimethoxyphenyl)-4-oxo-5,6,7-trimethoxytetralin-2-carboxylic acid (XII), m. 173-4°. In 300 ml. MeOH and 15 ml. concentrated H<sub>2</sub>SO<sub>4</sub>, 25 g.

XI is refluxed overnight while stirring to give the Me ester (XIII), m. 171-2°. The Et ester m. 144-5° (alc.). The Et ester (XIV)

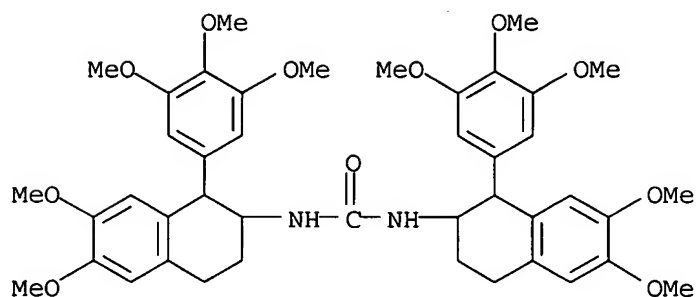
of XH is obtained by the same procedure, m. 132-3°. Catalytic hydrogenation of XIII gives III (R' = CO<sub>2</sub>Et), while IV (R' = CO<sub>2</sub>Et)

(b0.001 170°) is obtained from XIV. These new compds. are efficient cytostatic and antimitotic agents. They show low toxicity, even after long applications. They can be used in the treatment of some types of leukemias.

IT 3438-07-1, Urea, 1,3-bis[1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-2-naphthyl]-  
(preparation of)

RN 3438-07-1 CAPLUS

CN Urea, 1,3-bis[1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-2-naphthyl]- (7CI, 8CI) (CA INDEX NAME)



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AN 1964:30712 CAPLUS

DN 60:30712

OREF 60:5408h,5409a-h,5410a-h,5411a-g

TI Natural products inhibiting mitosis. XIV. Synthetic acid hydrazides and nitrogen mustard compounds of the podophyllotoxin series

AU Schreier, E.

CS Sandoz Ltd., Basel, Switz.

SO Helvetica Chimica Acta (1963), 46(7), 2940-65

CODEN: HCACAV; ISSN: 0018-019X

DT Journal

LA German

OS CASREACT 60:30712

GI For diagram(s), see printed CA Issue.

AB cf. CA 59, 11368a. The podophyllotoxin mol. (I) was modified to secure compds. with an improved antimitotic activity-toxicity ratio and with cytostatic activity. One derivative of this type is II, which has recently been introduced into therapeutics under the designation SP-I SANDOZ. The synthesis was now reported of hydrazides of 1,2-trans-1-aryl- and -1-aryl-4-hydroxytetralin-2-carboxylic acids containing alkoxy groups in various positions of the aromatic rings, as well as several nitrogen mustard compds., all being 1,2-trans-compds. instead of the cis variety in the natural series. 1-Phenyl-4-tetralone-2-carboxylic acid (III) (100 g.) suspended in 1 l. MeOH and 100 ml. concentrated H<sub>2</sub>SO<sub>4</sub>, and the mixture refluxed and stirred overnight and cooled several hrs. gave 96 g. Me ester (IV) of III, m. 119-20°, IV (50 g.) in 500 ml. AcOH hydrogenated over 6 g. 10% Pd-C at room temperature and atmospheric pressure (vibromixer) gave 44 g. 1-phenyltetralin-2-carboxylic acid Me ester, b<sub>0.01</sub> 130°, m. 72-3°. 1-(3,4-Dimethoxyphenyl)-4-oxo-6,7-dimethoxytetralin-2-carboxylic acid (V) (60 g.) suspended in 600 ml. MeOH and 60 ml. concentrated H<sub>2</sub>SO<sub>4</sub> and the mixture refluxed and stirred 8 hrs. and cooled several hrs. gave 56 g. Me ester (VI) of V, m. 146-7°. VI (50 g.) in 500 ml. AcOH hydrogenated over 5 g. 10% Pd-C as above gave 1-(3,4-dimethoxyphenyl)-6,7-dimethoxytetralin-2-carboxylic acid Me ester, m. 88-90° (MeOH). Catalytic reduction of 1-(3,4-dimethoxyphenyl)-4-oxo-5,6,7-trimethoxytetralin-2-carboxylic acid (VIa) Me ester gave 94% 1-(3,4-dimethoxyphenyl)-5,6,7-trimethoxytetralin-2-carboxylic acid Me ester, b<sub>0.001</sub> 170-5°, viscous oil. By the procedure of S. (loc. cit.) were prepared 1-(3,4,5-trimethoxyphenyl)-6,7-dimethoxytetralin-2-carboxylic acid Me ester (VII) and the 6,7-methylenedioxy analog (VIII) of VII. VIII (10 g.) suspended in 25 ml. anhydrous N<sub>2</sub>H<sub>4</sub> and the mixture refluxed 4 hrs., cooled, and diluted with EtOH gave 7.5IX (R = H, (R<sub>1</sub>R<sub>2</sub> =) CH<sub>2</sub>O<sub>2</sub>, R<sub>3</sub> = R<sub>4</sub> = R<sub>5</sub> = OMe) (X), m. 188-9° (decomposition) (EtOH). The following IX were similarly prepared (R, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, m.p. given): H, H, H, H, H, H, 148-9° (EtOH); H, MeO, MeO, H, MeO, MeO, 179-80° (decomposition) (EtOH); MeO, MeO, MeO, H, MeO, MeO, 158-9° (EtOH-H<sub>2</sub>O); H, MeO, MeO; MeO, MeO, MeO (Xa), 178-9° (decomposition) (CHCl<sub>3</sub>-EtOH). X (5 g.) suspended in 75 ml. MeOH containing 2.5 ml. AcH and the mixture refluxed 15 min. and cooled several hrs. gave 4.53 g. XI [RR' =) ethylidene] (XII), m.



198-9° (CH<sub>2</sub>Cl<sub>2</sub>-MeOH). The following XI were similarly prepared (RR' and m.p. given): dodecylidene, 142-3° (MeOH); isopropylidene, 205-6° (MeOH); benzylidene 222-3° (MeOH). XII (1 g.) dissolved in 50 ml. EtOH by heating, the solution cooled to room temperature, treated with 1 g. NaBH<sub>4</sub> in 10 ml. H<sub>2</sub>O, stirred overnight at room temperature, and worked up gave 0.94 g. XI (R = H, R' = Et) (XIII), m. 199-200° (EtOH). Reduction of XII with LiAlH<sub>4</sub> in tetrahydrofuran (THF) or by hydrogenation over Pd-C or Raney Ni in EtOH gave less pure XIII in poorer yields. Similarly was prepared XI (R = H, R' = dodecyl), m. 143-4° (EtOH). X (1 g.), 0.4 ml. PhCH<sub>2</sub>Cl, and 0.5 g. CaCO<sub>3</sub> in 20 ml. MeOH refluxed 2.5 hrs. and worked up gave 155 mg. XI (R = H, R' = CH<sub>2</sub>Ph), m. 181-2° (EtOH), CH<sub>2</sub>Cl<sub>2</sub>-EtOH). X (1 g.), 0.8 ml. PhCH<sub>2</sub>Cl, and 0.5 g. CaCO<sub>3</sub> in 20 ml. MeOH refluxed 24 hrs. and worked up gave 260 mg. XI (R = R' = CH<sub>2</sub>Ph), m. 156-7° (EtOH). X (1 g.) in 25 ml. EtOH and 5 ml. EtOAc refluxed 2 hrs. with freshly prepared Raney Ni (from 2.5 g. alloy) and worked up gave 810 mg. 2-carboxamide analog of X, m. 211-12° (EtOAc-Et<sub>2</sub>O, EtOAc). 1 - (3,4,5-Trimethoxyphenyl)-4-oxo-5,7-methylenedioxytetralin-2-carboxylic acid (XIV) (8 g.) dissolved in 160 ml. H<sub>2</sub>O with 12 ml. 2N NaOH with stirring, the solution treated dropwise with 4 g. NaBH<sub>4</sub> in 40 ml. H<sub>2</sub>O under ice cooling, kept overnight at room temperature, and worked up gave 7.5 g. 4-OH analog (XV) of XIV, m. 205-6° (decomposition) (MeOH-EtOAc, Me<sub>2</sub>CO-MeOH); from the work up mother liquor was isolated a product, m. 184-6° (decomposition), which was separated by fractional crystallization into XV and an epimer of XV, m. 178-82°. XV (500 mg.) suspended in 100 ml. N H<sub>2</sub>SO<sub>4</sub> refluxed and stirred 2 hrs., cooled to room temperature, and the precipitate (470 mg.) crystallized from CH<sub>2</sub>Cl<sub>2</sub>-Et<sub>2</sub>O gave 350 mg.

1-(3,4,5-trimethoxyphenyl)-6,7-methylenedioxy-1,2-dihydro-2-naphthoic acid (XVI), m. 181-2° (MeOH). XV (500 mg.) in 5 ml. AcOH refluxed 4 hrs. and worked up gave 360 mg. XVI, m. 180-1° (Et<sub>2</sub>O, CH<sub>2</sub>Cl<sub>2</sub>-Et<sub>2</sub>O). XV (300 mg.) heated 15 min. at 250° and distilled in vacuo gave 250 mg. XVI, b<sub>0.001</sub> 220°, m. 179-80° (Et<sub>2</sub>O-petr. ether, Et<sub>2</sub>O). Me ester (XVII) of XVI (via Et<sub>2</sub>O-CH<sub>2</sub>N<sub>2</sub>) m. 138-9° (MeOH). XV (1 g.) with Et<sub>2</sub>O-CH<sub>2</sub>N<sub>2</sub> gave 905 mg. Me ester (XVIII) of XV, m. 180-1° (MeOH). XVIII (1 g.) suspended in 20 ml. N NaOH and the mixture refluxed and stirred 3 hrs. and worked up gave 730 mg. XV, m. 201-2° (decomposition) (EtOH, Me<sub>2</sub>CO). XVIII (250 mg.) kept 20 hrs. at room temperature in 2 ml. pyridine with 1 ml. Ac<sub>2</sub>O and the solution evaporated in vacuo gave the O-Ac derivative of XVIII, m. 178-9° (MeOH). 4-Oxo derivative of VIII (20 g.) in 400 ml. THF and 200 ml. MeOH treated portionwise with 20 g. NaBH<sub>4</sub> with stirring and ice cooling, stirred 2 hrs. at 0-5°, treated dropwise with 280 ml. 2N HCl, and worked up gave 13.25 g. XVIII, m. 180-1° (MeOH); the MeOH mother liquor evaporated in vacuo and the residue (7 g.) chromatographed on silica gel with C<sub>6</sub>H<sub>6</sub> gave XVII and 1.55 g. XIX, m. 218-19° (MeOH, CH<sub>2</sub>Cl<sub>2</sub>-MeOH); further elution with CH<sub>2</sub>Cl<sub>2</sub> gave both C-4 epimers of 1-(3,4,5-trimethoxyphenyl)-4-methoxy-6,7-methylenedioxytetralin-2-carboxylic acid Me ester (XX); the lower melting isomer (XXI) of XX m. 149-50° (MeOH), and the higher melting isomer (XXII) of XX m. 160-1° (EtOH). XVIII (1 g.) suspended in 30 ml. MeOH containing 3 drops concentrated H<sub>2</sub>SO<sub>4</sub> and the mixture refluxed 2.5 hrs.

and

worked up gave 420 mg. XXI, m. 150-1° (MeOH); from the MeOH mother liquor were obtained 105 mg. XVII and 45 mg. XXII. XV (2 g.) in 10 ml. pyridine and 5 ml. Ac<sub>2</sub>O kept 4 hrs. at room temperature and worked up gave 1.4 g. XV-γ-lactone (XXIII), m. 196-7° (MeOH). Heating XV with Ac<sub>2</sub>O gave 40% XXIII. XV (4.02 g.) in 50 ml. dioxane stirred 2 hrs. at room temperature with 2.1 g. dicyclohexylcarbodiimide (DCC) and worked up gave 3.15 g. XXIII, m. 196-7° (MeOH, CH<sub>2</sub>Cl<sub>2</sub>-MeOH). 1-(3,4,5-Trimethoxyphenyl)-4-oxo-6,7-dimethoxytetralin-2-carboxylic acid (XXIV) (S., loc. cit.) (4.16 g.) in 150 ml. H<sub>2</sub>O containing 6 ml. 2N NaOH treated with 2 g. NaBH<sub>4</sub> in 50 ml. H<sub>2</sub>O 6 hrs. at room temperature and worked up gave 2.76 g. 4-OH analog (XXV) of XXIV, m. 181-2° (decomposition) (Me<sub>2</sub>CO); Me ester (via Et<sub>2</sub>OCH<sub>2</sub>N<sub>2</sub>) m. 157-8° (MeOH); O-Ac derivative (with Ac<sub>2</sub>O-pyridine

at 20°) m. 132-3° (MeOH). XXV (1 g.) in 10 ml. Ac2O refluxed 2 hrs. and evaporated in vacuo gave 620 mg. XXV  $\gamma$ -lactone (XXVI), m. 158-9° (MeOH). XXV (1.66 g.) in 25 ml. dioxane treated with 0.83 g. DCC in 5 ml. dioxane 2 hrs. at room temperature and worked up gave 1.29 g. XXVI, m. 159-60° (MeOH). VIa (4.16 g.) in 150 ml. H2O containing 6 ml. 2N NaOH treated with 2 g. NaBH4 in 50 ml. H2O 6 hrs at room temperature, worked up, the product refluxed 1 hr. with 25 ml. Ac2O, and the solution evaporated in vacuo gave 2.1 g.  $\gamma$ -lactone of 4-OH analog of VIa, m. 152-3° (Et2O, CH2Cl2-Et2O, MeOH). XVIII (10 g.), 100 ml. MeOH, and 20 ml. anhydrous N2H4 refluxed 1 hr. and cooled gave 8.4 g. XXVII (R = NH2, R1 = H, (R2R3 = ) CH2O2, R4 = R5 = R6 = MeO) (XXVIII), m. 232-3° (decomposition) (EtOH). XXIII (1 g.), 25 ml. MeOH, and 2 ml. anhydrous N2H4 refluxed 1 hr. and cooled gave 0.8 g. XXVIII. Similarly were prepared XXVII (R = NH2, R1 = R2 = R3: R5 = R6 = MeO, R4 = H), m. 192-3° (decomposition) (MeOH), and XXVII (R = NH2, R1 = H, R2 = R3 = R4 = R5 = R6 = MeO), m. 229-30° (decomposition) (EtOH-H2O). XXVIII (1 g.), 15 ml. MeOH, and 0.5 ml. AcOH refluxed 15 min. and cooled gave 985 mg. XXVII (R = N:CHMe, R1 = H, (R2F3 = ) CH2O2, R4 = R5 = R6 = MeO) (XXIX), m. 200-2° (decomposition) (MeOH). From XXIII were similarly prepared the following alkylidene derivs. (alkylidene group and m.p. given): dodecylidene, 174-5° (decomposition) (EtOH); isopropylidene, 212-13° (MeOH); benzylidene, 214-15° (EtOH). XXIX (1 g.) in 50 ml. 90% EtOH stirred 2 hrs. at room temperature with 1 g. NaBH4 and worked

up

gave 860 mg. ethylhydrazide analog of XXIX, m. 221-2° (decomposition) (MeOH, CHCl3-MeOH). To 4.16 g. Xa in 15 ml. 2N HCl and 2N cc. AcOH, 10 ml. N NaNO2 was added dropwise with cooling; after 10 min. the solution was poured on 200 g. ice and worked up, and the crude azide in 20 ml. PhMe refluxed 2 hrs. with 5 ml. PhCH2OH to give 4.2 g. XXX (R = H, R1 = R2 = R3 = R4 = R5 = MeO) (XXXI), m. 178-9° (EtOH). The following XXX were similarly prepared (R, R1, R2, R3, R4, R5, and m.p. given): H, H, H, H, H, H, 119-20° (Et2O) and 109-10° (EtOH); H, MeO, MeO, H, MeO, MeO, 175-6° (CHCl3EtOH); MeO, MeO, MeO, H, MeO, MeO, 147-9° (EtOH); H, (R1R2 = ) CH2O2, MeO, MeO, MeO, 182-3° (CHCl3-EtOH). XXXI in 75 ml. AcOH hydrogenated over 100 mg. 10% Pd-C at room temperature and atmospheric pressure (hydrogenation was rapid), and the mixture worked up gave

2.85

g. XXXII (R = H, R1 = R2 = R3 = R4 = R5 = MeO) (XXXIII), b0.001 180°, m. 109-11° (MeOH-2O) HCl salt m. 278-80° (decomposition) (H2O); N-Ac derivative m. 204-5° (EtOH), H maleate m. 198-9° (decomposition) (Me2CO); N-Bz derivative m. 240-1° (CH2Cl2-MeOH). Xa (4.16 g.) converted to the azide as above, the crude azide refluxed 3 hrs. in 20 ml. MeOH, and the solution concentrated gave 3.55

g. Me

urethan analog (XXXIV) of XXXI, m. 190-1° (CHCl3--EtOH). XXXIV (2 g.) in 40 ml. EtOH and 40 ml. 40% aqueous NaOH refluxed overnight and worked up gave 320 mg. XXXIII; m. 109-11°. Xa converted to the azide as above, the acidic aqueous solution of the azide added to 250 ml. boiling 2 N

HCl,

and the whole boiled and stirred 15 min. and worked up gave 1.7 g. putative N,N'-bis [1-(3,4,5-trimethoxyphenyl)-6,7-dimethoxy-2-tetralyl]urea, m. 255-6° the mother liquor gave 1.8 g. XXXIII.HCl, m. 277-9° (H2O). The following XXXII were prepared (R, R1, R2, R3, R4, R5, m.p., m.p. HCl salt, and m.p. N-Ac derivative given): H, H, H, H, H, H, 67-8° (petr. ether), 280-1° (decomposition) (EtOH), 175-6° (EtOH); H, MeO, MeO, H, MeO, MeO, 15-2° (EtOH), 270-2° (decomposition) (H2O-EtOH), 224-5° (EtOH-H2O); MeO, MeO, MeO, H, MeO, MeO, 101-2° (EtOH-Et2O), 252-3° (decomposition) (EtOH), 191-2° (EtOH); H, (R1R2 = ) CH2O2, MeO, MeO, MeO, 152-3° (EtOH), 274-5° (decomposition) (H2OEtOH), 227-8° (EtOH-H2O). XXIII (15 g.), 150 ml. MeOH, and 15 ml. ethylene oxide kept overnight at room temperature and 2 hrs. at 60° in a closed vessel and worked up gave 92% XXXIV (R = H, R1 = R2 = R3 = R4 = R5 = MeO) (XXXV), m.

107-8° (Et2O); methanolate m. 86-7° (MeOH). XXXV (0.8 g.), 5 ml. pyridine, and 3 ml. Ac2O kept overnight at room temperature and worked up gave the di-O-Ac derivative of XXXV, b0.001 220°. The following XXXIV were prepared (R, R1, R2, R3, R4, R5, m.p., and b.p./mm. of di-O-Ac derivative given): H, H, H, H, H, H, 133-4° (MeOH), -; H, MeO, MeO, H, MeO, MeO, 114-15° (CH2Cl2Et2O), -; MeO, MeO, MeO, H, MeO, MeO, 95-6° (CH2Cl2Et2O), 225-30°/0.001; H, (R1R2 =) CH2O2, MeO, MeO, MeO, 208-9° (EtOH), 215°/0.001. XXXV (15 g.) and 10 ml. SOCl2 in 150 ml. CH2Cl2 heated and stirred 1 hr. at 60° and the solution evaporated in vacuo gave 16.1 g. XXXVI (R = H, R1 = R2 = R3 = R4 = R5

MeO) HCl salt (XXXVII.HCl), m. 210-12° (decomposition) (Me2CO). XXXVII.HCl (15 g.) gave 12.3 g. XXXVII, m. 123-4° (MeOH). The following XXXVI were prepared (R, R1, R2, R3, R4, R5, m.p., and m.p. HCl salt given): H, H, H, H, H, H, 80-1° (petr. ether), -; H, MeO, MeO, H, MeO, MeO, 113-14° (Et2O), 196-8° (decomposition) (MeOH-Me2CO); MeO, MeO, MeO, H, MeO, MeO, -, 166° (decomposition) (EtOAc); H, (RR2 =) CH2O2, MeO, MeO, MeO, 139-40° (Me2CO-MeOH), 205-6° (decomposition) (EtOH-Me2CO). Most of the new compds. were used in orientation studies for cytostatic activity. Of the investigated IX, XI, XXVII, XXXII, and  $\gamma$ -lactones of 1-aryl-4-hydroxytetralin-2-carboxylic acids, only the 6,7-methylene-3',4',5'-trimethoxy-substituted representatives exhibited a significant inhibiting action of cell division in in vitro tests with P-815 mastocytoma cell cultures. The XXXVI cell showed a strong inhibition of cell increase in cell cultures with mouse ascites tumor. Results of other pharmacol. tests, as well as infrared and ultraviolet spectral data, were given.

IT 3438-07-1, Urea, 1,3-bis[1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-2-naphthyl]-  
(preparation of)

RN 3438-07-1 CAPLUS

CN Urea, 1,3-bis[1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-2-naphthyl]- (7CI, 8CI) (CA INDEX NAME)

